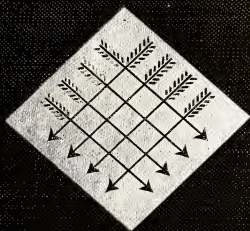


NK
7250
V4X
1908
CHM

SHEFFIELD PLATE



H. N. VEITCH

EX LIBRIS

COOPER UNION MUSEUM
FOR THE ARTS OF DECORATION

GIVEN BY

M. JOHNSTON-BROWN

IN

FEB. 1909

Uniform with this Volume.

PEWTER PLATE

A HANDBOOK FOR COLLECTORS

BY H. J. L. J. MASSÉ, M.A.

With 100 Illustrations.

Imperial 8vo, 21s. net.

"To the collector and the connoisseur this book will be of the highest value, and will take its place as a standard."—*Daily Telegraph*.

"The excellent volume compiled by Mr. Massé, the first of any real importance on this subject in our language."—*Morning Post*.

"Certain to be appreciated as it deserves by connoisseurs."—*Athenæum*.

LONDON: GEORGE BELL AND SONS.

SHEFFIELD PLATE



THOMAS BOLSOVER

From a drawing in the Author's possession]

[Frontispiece

7250
V4X
1908
c+M

SHEFFIELD PLATE

ITS HISTORY, MANUFACTURE
AND ART

WITH MAKERS' NAMES AND MARKS, ALSO A NOTE ON FOREIGN
SHEFFIELD PLATE WITH ILLUSTRATIONS

BY

HENRY NEWTON VEITCH



LONDON
GEORGE BELL AND SONS

1908



CHISWICK PRESS : CHARLES WHITTINGHAM AND CO.
TOOKS COURT, CHANCERY LANE, LONDON.

ROBERTO DRANE
PRAECEPTORI MEO DELECTISSIMO,
HOC PRIMUM OPUSCULUM
DEDICAVI

PREFACE

UPON the subject of "Old Sheffield Plate" but little literature exists: a certain amount of fugitive and pamphlet work has appeared, yet the greater portion of this cannot be regarded as either exhaustive or reliable. The compilation of this volume has involved much labour and research, though the subject had long been my special study; yet, had I not, as a dealer, been in constant touch with the old manufacture, it could never have assumed its present form.

I have endeavoured to describe the nature of "Old Sheffield"; to explain its construction; to portray its history and name its makers; to place it in proper order and upon a proper footing; to set it, in fact, in a position of far more honour and distinction than that to which it has hitherto been assigned.

Much information upon the subject is included in this volume which I believe to be new to the reading world; my thanks are due to all who have assisted me in procuring this, no less than to those from whose Collections I have been enabled to borrow specimens and marks for illustration. To the following I am especially grateful: to the Right Honourable the Viscountess Wolseley, to the Birmingham Assay Master (Mr. Westwood), to Mr. T. Ducrow, Mr. L. T. Richardson, Mr. P. F. Morton, Mr. John Page, Mr. Muirhead Moffatt, Mr. John Brown,

and to Miss Katherine Joyce and Miss Phyllis Green. My acknowledgements are also due to Mr. Sherard Cowper-Coles, to the Birmingham Archaeological Society, to the Editor of the "Connoisseur Magazine," and especially to the Editor of the "Burlington Magazine" for the loan of certain illustrations, and to Mr. George Allen and Mr. T. Ducrow for the use of Original Makers' Catalogues and permission to reproduce them.

I should be glad to receive any information or impressions of marks not included in the present volume.

In conclusion, I desire to record my indebtedness to my wife ("Kathleen Haydn Green") for much valuable aid in research and secretarial work.

HENRY NEWTON VEITCH.

4, BENNETT STREET,
ST. JAMES'S, S.W.
September, 1908.

CONTENTS

CHAPTER	PAGE
I. INTRODUCTION	I
II. INTRODUCTION (<i>continued</i>)	7
III. THE DISCOVERY IN SHEFFIELD	13
IV. PROCESS OF MANUFACTURE. (FIRST PERIOD)	21
V. PROCESS OF MANUFACTURE—(<i>continued</i>)	35
VI. TINNING	44
VII. DIES, STAMPING, AND SWAGING	48
VIII. CHASING AND PIERCING	56
IX. WIREWORK	64
X. BUCKLES AND BUTTONS	74
XI. GENERAL NOTE ON FIRST PERIOD	83
XII. ILLUSTRATIONS FROM ORIGINAL PIECES OF THE FIRST PERIOD (WITH DESCRIPTIVE NOTES)	87
XIII. ILLUSTRATIONS FROM ORIGINAL MAKER'S CATALOGUE OF THE FIRST PERIOD (WITH DESCRIPTIVE NOTES)	153
XIV. TRANSITION PERIOD. WITH ILLUSTRATIONS FROM ORIGINAL PIECES AND FROM ORIGINAL MAKER'S CATALOGUE (WITH DESCRIPTIVE NOTES)	184
XV. PROCESS OF MANUFACTURE. (SECOND PERIOD).	197
XVI. PROCESS OF MANUFACTURE—(<i>continued</i>)	202
XVII. GILDING	211
XVIII. GENERAL NOTE ON SECOND PERIOD	217
XIX. ILLUSTRATIONS FROM ORIGINAL PIECES OF THE SECOND PERIOD, AND FROM ORIGINAL MAKER'S CATALOGUE (WITH DESCRIPTIVE NOTES)	220
XX. ELECTRO-PLATING	253
XXI. REPLATED AND "FAKED" PIECES	261
XXII. MAKERS' MARKS AND THEIR HISTORY	267
XXIII. NAMES OF MAKERS IN SHEFFIELD	284

CHAPTER	PAGE
XXIV. NAMES OF MAKERS IN BIRMINGHAM . . .	292
XXV. NAMES OF MAKERS IN LONDON, NOTTINGHAM, EDIN- BURGH, GLASGOW, AND DUBLIN . . .	323
XXVI. FOREIGN SHEFFIELD PLATE (WITH MARKS AND ILLUS- TRATIONS)	342
INDEX	357

LIST OF ILLUSTRATIONS

PORTRAIT OF THOMAS BOLSOVER. (From a drawing in
the Author's possession) *Frontispiece*

FIRST PERIOD

PLATE	PAGE
I. IRISH POTATO RINGS. (Collection of Colonel Claude Cane) <i>face</i>	62
II. HOT-WATER JUG. (Collection of Mr. Dighton) . . .	89
III. COFFEE POT. (Property of Mr. Leo Fisher) . . .	91
IV. GROUP OF TWO CANDLESTICKS. (Property of Mr. Leo Fisher and the Author)	93
V. CUP AND COVER. (Collection of Viscountess Wolseley) .	95
VI. TWO-HANDLED CUP. (Collection of Viscountess Wolseley)	97
VII. ESCALLOP SHELL (ONE OF A SET OF FOUR). (Collection of the Author)	99
VIII. SUGAR CASTER. (Collection of Viscountess Wolseley) .	101
IX. TEA POY. (Collection of Viscountess Wolseley) . . .	103
X. STONEWARE BEER MUG, WITH SHEFFIELD PLATE MOUNT. (Collection of Mr. Drane)	105
XI. TANKARD AND COVER. (Collection of Viscountess Wolseley)	107
XII. CANDLESTICK. (Collection of Mrs. Johnson-Brown) . .	109
XIII. HOT-WATER JUG. (Property of Mr. Dighton) . . .	111
XIV. HOT-WATER JUG. (Collection of Viscountess Wolseley) .	113
XV. GROUP OF FOUR BOXES. (Collection of the Author) . .	115
XVI. THREE POTATO RINGS. (Collection of Ludford C. Docker, Esq.; A. J. Bethell, Esq.; and the Author)	117
XVII. LARGE AND SMALL BASKETS. (Collection of Viscountess Wolseley)	119
XVIII. COFFEE POT; PINT MUG; HOT-WATER JUG; CHOCOLATE POT; ESCALLOP SHELL. (Collection of the Author) . . .	121
XIX. SUGAR AND CREAM PAILS. (Property of Messrs. Wilson and Sharp)	123
XX. TEA POY. (Collection of Viscountess Wolseley) . . .	125
XXI. TWO PUNCH BOWLS. (Collection of A. J. Bethell, Esq.) .	127
XXII. TWO CAKE BASKETS. (Property of Messrs. Elkington) .	129

PLATE	PAGE
XXIII. BASKET ON THREE FEET; BASKET ON OVAL FOOT. (Collection of Viscountess Wolseley)	131
XXIV. CANDELTICK. (Collection of Mrs. Johnson-Brown)	133
XXV. TAPER STAND. (Collection of Viscountess Wolseley)	135
XXVI. DISH-CROSS; TEA CADDY; THREE SALT CELLARS; MUSTARD POT. (Collection of the Author.) SALT CELLAR. (Collection of Mr. A. Gordon Grant)	137
XXVII. CANDELABRA, also showing adaptation to a single light. (Collection of Mrs. Johnson-Brown.) SWEETMEAT OR BON-BON BASKET. (Property of Messrs. Wilson and Sharp.) TANKARD, WITH COVER; TEA CADDY. (Col- lection of the Author)	139
XXVIII. BUTTER-COOLER AND STAND; DOUBLE TEA CADDY. (Collection of A. J. Bethell, Esq.)	141
XXIX. CANDELABRA, showing adaptation to a single light. (Collection of Mrs. Johnson-Brown.) ARGYLE; WINE COOLER; ESCALLOP SHELL. (Collection of the Author)	143
XXX. SUGAR BOWL, WITH COVER; TEAPOT; MUSTARD POT. (Viscountess Wolseley)	145
XXXI. SMALL CANDELTICK. (Collection of the Author.) CANDELTICK; SUGAR BASKET; CREAM JUG. (Col- lection of Mrs. H. Newton Veitch.) SALVER. (Pro- perty of Mr. H. B. Crouch)	147
XXXII. DOUBLE COASTER; SINGLE COASTER. (Property of Mr. Muirhead Moffatt)	149
XXXIII. EPERGNE (WIREWORK). (Collection of G. A. Bishop, Esq.)	151

REPRODUCTIONS FROM ORIGINAL MAKERS' CATALOGUE—FIRST PERIOD

XXXIV. TWO CANDELTICKS	157
XXXV. THREE-BRANCH SCONCE	159
XXXVI. SQUARE CANDELTICK	161
XXXVII. THREE CHAMBER CANDELTICKS AND SNUFFERS	163
XXXVIII. SIX CANDELTICKS ON SQUARE FEET	165
XXXIX. OVAL TEAPOT; FISH SLICE; FORK	167
XL. TEAPOT	169
XLI. FOUR CREAM JUGS	171
XLII. WINE LABEL; SIX CADDY SPOONS; TWO PAIRS SUGAR TONGS; TEA CADDY	173
XLIII. FOUR SUGAR BASINS OR CREAM PAILS (ONE WITH SPOONS)	175

LIST OF ILLUSTRATIONS

xiii

PLATE	PAGE
XLIV. SOY FRAME; TWO SALT CELLARS	177
XLV. TEN SALT CELLARS	179
XLVI. TWO MUSTARD POTS, TWO MUFFINEERS, AND AN INKSTAND	181
XLVII. FOUR BOTTLE-STANDS OR COASTERS	183

TRANSITION PERIOD

XLVIII. SAUCE TUREEN. (Property of Messrs. Wilson and Sharp)	187
XLIX. SMALL TEAPOT. (Property of Messrs. Wilson and Sharp)	189

ORIGINAL MAKER'S CATALOGUE—TRANSITION PERIOD

L. TEAPOT	191
LI. SIX SNUFFER TRAYS	193
LII. GLOBE INKSTAND	195

SECOND PERIOD

LIII. TEA URN. (Property of Messrs. Sorley)	221
LIV. WIRE BASKET. (Property of Mr. J. G. May)	223
LV. TWO ENTRÉE DISHES. (Collections of T. Evans, Esq., and W. H. Renwick, Esq.) ARGYLE. (Collection of the Author)	225
LVI. TRAY. (The property of Messrs. Sorley)	227
LVII. "WARWICK VASE" WINE COOLER. (Collection of J. Topham Richardson, Esq.)	229
LVIII. WINE COOLER. (Collection of Mrs. Johnson-Brown)	231
LIX. CANDELABRA. (Collection of A. C. Dickins, Esq.)	233
LX. TUMBLING CUP. (Property of Messrs. Wilson and Sharp.) POCKET COMMUNION SET. (Collection of Rev. Harold Haydn Green.) TAZZA. (Property of Messrs. Botley and Lewis)	235
LXI. TAPER BOX, SNUFFER TRAY WITH SNUFFERS AND TWO EXTINGUISHERS. (Collection of Viscountess Wolseley)	237
LXII. FOUR CANDLESTICKS. (Property of Messrs. Craibe Angus and Son, Mrs. Balfour Cockburn, and the Author)	239
LXIII. SALVER ON THREE FEET, COFFEE POT, ARGYLE, AND MUSTARD POT. (Collection of the Author)	241

LIST OF ILLUSTRATIONS

PLATE	PAGE
LXIV. CENTREPIECE, SNUFFERS AND TRAY, ENTRÉE DISH. (Collection of the Author.) WINE COOLER. (Col- lection of Mrs. Johnson-Brown)	243
LXV. TRAY. (Property of Mr. Thomas Edwards)	245
LXVI. WINE-COOLER (ON SQUARE BASE), WINE-COOLER (ON ROUND FOOT), SAUCE TUREEN, SOUP TUREEN, CANDELABRA. (Property of Messrs. Elkington)	247

ORIGINAL MAKER'S CATALOGUE—SECOND
PERIOD

LXVII. SALAD STAND	249
LXVIII. ENTRÉE DISH	251
LXIX. BUSINESS CARD OF WILLIAM RYLAND	<i>face</i> 252
LXX. BUSINESS CARD OF THE SOHO PLATE COMPANY	<i>face</i> 322
LXXI. MEDAL STRUCK IN MEMORY OF MATTHEW BOULTON	<i>face</i> 322

FOREIGN SHEFFIELD PLATE

LXXII. PUNCH BOWL (FRENCH). (Property of Messrs. Holmes and Mapleson)	349
LXXIII. TEAPOT (FRENCH). (Collection of the Author)	351
LXXIV. MUSTARD POT (DUTCH), SALT CELLAR (DUTCH), "TABAKSCOMFORTJE" (DUTCH PIPE-LIGHTER). (Col- lection of the Author)	353
LXXV. WINE-COOLER (RUSSIAN). (Collection of the Author)	355

ILLUSTRATIONS IN THE TEXT

TOOLS USED IN RAISING	29, 30, 31, 32, 33
SWAGES	54
SNARLING IRON AND RING	58
SNARLING IRON IN USE	59
FLUTING	61
STEEL AND AGATE BURNISHERS	209, 210

SHEFFIELD PLATE

CHAPTER I

INTRODUCTION

HERE is something essentially English about "Sheffield Plate"—originally, as its name denotes, an English invention, it passed through that fortunate period when Art in England was at its zenith. Among bygone industries "Sheffield Plating" claims a unique position as practically the only art not taught us by the foreigner. We learnt from the Far East to make fine porcelain: we taught the Continent to make our plated ware. In neither case can it be said the pupil's work excelled the master's; our English porcelain has never surpassed the finest specimens of Oriental Art, and in the making of Sheffield Plate our native craftsmen held their own. There are no pieces of "Old Sheffield" to compare in design, in treatment, in construction, with those on which were lavished the best English skill and labour. Thought and patience were not begrudged to the minutest detail, and even a clever workman marvels when comparing the finest productions of the sterling silver ware of to-day with the mere substitutes of one hundred years ago. Small wonder that a connoisseur prefers "Old Sheffield" to modern silver, and that pieces of early date and in good condition command high prices.

The word "plate" means, strictly speaking, "wrought," or "fashioned silver." It is derived from the Spanish "plata" = "silver": Old French = "plate," or "plette." Some authorities, however, consider the word "plate" to be traceable to the Greek "platys" = flat, and to mean "flattened silver." The term "plate" was at one time applied to drinking cups, "a Plate of Ale" being

used at Trinity College, Cambridge, to designate the silver flagons in vogue amongst the students. Assuming, therefore, that the word "plate," whichever derivation be adopted, means "silver in a prepared state," to speak of "Silver Plate," or "Gold Plate," can scarcely be deemed correct; yet both terms have long been sanctioned by custom.

The art of "plating" is now always considered to mean "the overlaying of one metal by another," for the sake of ornament, when a pattern or a design in one metal is "plated" or inlaid upon another, or from motives of economy a metal of less value is "plated" or covered with a precious metal, to serve as an imitation of the latter.

There is nothing new in attempted imitations of gold and silver; the art has attracted attention from the earliest times, and various methods have been practised with success.

The ancient Eastern nations had an advanced knowledge of the uses of metals, the Jews and Egyptians being particularly skilled in gilding and fine metal wire-work. The Assyrian metal workers were also most successful in overlaying iron with bronze, but it is scarcely possible to ascertain what method they used, as they worked in secret, and made a mystery of the art. It may, however, be affirmed that they knew no process of "plating" one metal upon another; their gold or silver was laid upon the base metal after the latter had been shaped or "made up." Their art, also, was almost entirely devoted to vessels and ornaments for their temples, hence the secrecy maintained by the makers, and the difficulty of tracing any process of manufacture.

More definite records are left to us of the Roman methods of gilding and silvering the baser metals. Copper vessels coated with silver have been found at Herculaneum, and we read that the Romans decorated their harness and armour with ornaments of silvered copper. Pliny describes the mirrors of silvered tin used by the Roman ladies, and, in his "Natural History," gives in full the method used in his day of applying gold or silver to articles of tin or copper. This process is similar to what we know as "amalgamating," *i.e.*, the precious metal was applied to the article by an amalgam of quicksilver. According to Pliny: "The most convenient method for gilding copper would be to employ quicksilver.

The copper must first be well hammered, after which it is subjected to the action of fire. It is then cleansed of all extraneous substances, it being known by its brightness when it has been sufficiently purified. This done, it is again heated by fire in order to enable it when thus prepared, with the aid of an amalgam of pumice, alum, and quicksilver, to receive the gold leaf when applied." Silver was applied in the same way. A mixture of lead and tin called "Stannum" was also used to cover copper drinking vessels, as (to quote the Roman author) "when copper vessels are coated with stannum, they produce a less disagreeable flavour and the formation of verdigris is prevented."

The Romans even made a substitute for gold by a process of "false gilding," *i.e.*, they covered silver articles with a yellow paste which gave the appearance of gold.

The making of gold and silver leaf is a very ancient art, and the same process appears to have been used from the earliest times. The gold, or silver, was beaten between two sheets of parchment until it attained the desired thinness. To prevent the metal adhering on either side, the parchment was first covered with burnt ochre and rubbed smooth very carefully. This process is described by the German Monk Theophilus (known also as Rugerus). His work, "De Diversis Artibus, seu Diversarum Artium Schedula," written in the Eleventh Century, may be described as an "Encyclopaedia of Christian Art of that day." In it he treats in detail of Miniature painting, Glass making, Working in Enamels, and the Goldsmith's Art. He also mentions a method of "False Gilding" similar to that used by the Romans. It is remarkable that his instructions are so lucid as to be easily followed even at the present day.

The ancient Mexicans and Peruvians had a very advanced knowledge of the nature and uses of metals. Their silversmiths were masters of all the arts of working both in gold and silver, and in their imitations. There have been found in Peru articles of silver plated upon copper by a process evidently similar to "Sheffield Plating," the two metals being fixed together by the action of heat *before* "making up." It cannot be definitely ascertained that this method of plating was known to any other nation either in Asia or Europe: but among the relics of old Celtic days

discovered in Ireland are ornaments of bronze inlaid, or "plated" with gold by some process which must certainly have been allied to "Sheffield Plating." Its performance remains a mystery, and suggests much interesting conjecture. That the Celts were skilled workers in metals is easily proved: their art has left us such marvels of the silversmith's craft as the Ardagh Chalice and the Tara Brooch; according to Holinshed the Ancient Britons paid part of their annual tribute to Augustus in gold and silver collars; it seems highly probable that they attempted imitations of the precious metals, but too little remains of their inlaid or plated work to allow any definite revelations of their methods. "Sheffield Plating" appears as a new invention in England during the Eighteenth Century, yet it remains an open question whether so obvious and durable a method of imitating silver could have remained undiscovered in Europe, or whether it was known, and merely brought into prominence when applied to articles of domestic use.

In Saxon times the goldsmith's craft received special support from Alfred the Great, and English metal-workers were already famous on the Continent in the Eighth Century. They were practised in the art of overlaying the baser metals with gold, but there is no record of any process save that of amalgamating.

Little remains to us of the goldsmith's work during the troublous days of the Norman rule in England; but the names of many goldsmiths of the Twelfth Century have been preserved, notable among them being the Monk Anketil, who was despatched to the Danish Court to "show and impart his skill in silver, gilding and jewellery." It seems probable that other English goldsmiths held similar posts. Until the Thirteenth Century the Church had control of arts and crafts in England, and the absorption of the nation in church building turned the attention of the goldsmith to church vessels; articles for domestic use, therefore, received but scanty attention. Yet some method of plating must have been known and practised in England, since at the beginning of the Fifteenth Century the art of imitating silver had reached a high standard of perfection, and so successful a trade in gilt and silvered articles had been established, that it became necessary to control it by law.

It appears that unscrupulous merchants had little difficulty in selling their wares as genuine gold and silver: therefore, in 1403 was passed an Act of Parliament forbidding the fraudulent sale of such imitations. The Statute is worded as follows:

"Item. Whereas many fraudulent Artificers, imagining to deceive the Common People, do daily make Locks, Rings, Beads, Candlesticks, Harness for Girdles, Hilts, Chalices, and Sword-pommels, Powder-boxes, and covers for Cups, of Copper and of Latten,¹ and the same overgilt or silver like to Silver and Gold, and the same sell and put in gage to many men not having knowledge thereof for whole Gold and whole Silver to the great Deceit, Loss, and Hindrance of the Common People and the wasting of Gold and Silver:

"It is ordained and established that no Artificer nor other Man whatsoever he be from henceforth shall gilt nor silver any such Locks, Rings, Beads, Candlesticks, Harness for Girdles, Hilts, Chalices, and Sword-pommels, Powder-boxes, and covers for Cups, made of Copper or Latten, upon Pain to forfeit to the King's C's at every time that he shall be found guilty, and to make satisfaction to the Party grieved for his Damages:

"But that, (Chalices always excepted), the said Artificers may work or cause to be wrought Ornaments for the Church of Copper or Latten, and the same gilt or silver, so that always in the Foot or some Part of every such Ornament so to be made, the Copper and Latten shall be plain, to the intent that a Man may see whereof the Thing is made for to eschew the Deceit aforesaid."

The distinction with regard to Church ornaments appears at first sight strange, but it must be again suggested that very little metal-work was at that time applied to articles for domestic use; imitation gold and silver would not, for instance, be sought after for tableware, but rather used for large pieces intended as offerings to the Church; hence the limitations in the Statute as above. In the following year this Statute, it is interesting to observe, was amended, and the relaxation extended to "Knights' Spurs, and Barons' Apparel."

The disastrous Wars of the Roses, which for a time almost destroyed home life in England, are responsible for the scanty

¹ "Latten" = Tin.

records remaining to us of the metal-workers of that period; but few examples of English pre-Tudor plate are known to exist, domestic wares being barely represented. The goldsmith flourished once more during the prosperous Tudor epoch, and it seems highly probable that the increased use and display of gold and silver brought once more to light their imitations; for the art of gilding and silvering the baser metals must have been largely practised during the Sixteenth and Seventeenth Centuries. It was evidently still regarded by the authorities as an abuse, for during the reign of James I an Act of Parliament was passed to control the lavish use of "Gold and silver foliate" (*i.e.*, leaf). This Statute sets forth that: "The better to prevent the lavish Use of gold and silver Foliate within this Realm, none such shall from henceforth be wrought or used in any Building, Ceiling, Bedstead Wainscot, etc., but only in Armour and Weapons, or on Ensigns or Monuments of the Dead."

Again it should be noticed that no mention is made of articles for domestic use, or of tableware.

About this time a superficial method of silvering copper was often employed. A sort of silver paste was rubbed on to the copper without the application of heat. Breastplates for coffins were sometimes silvered in this way, the lack of durability in the silver being of little account when applied to such a purpose!

CHAPTER II

INTRODUCTION—*continued*

DURING the Eighteenth Century a desire for greater refinement in the home seems to have sprung up among the middle classes in England. There had been up to this time but little comfort, and less luxury, save in the houses of the nobility and wealthier gentry. In the Fourteenth Century a tradesman's house would have been considered amply furnished with domestic utensils had it contained a brass pot, an iron spit and frying-pan, a candlestick of latten and a couple of plates (the latter probably of wood).

Vessels of wood, or "treene," were in general use in England until the Sixteenth and Seventeenth Centuries, when they were more or less replaced by pewter. In 1637, according to a contemporary writer, drinking cups were made "of ebene and box, of leather tipt with silver; and cups were made out of hornes of beastes, of cocker nuts, of goordes, of the eggs of ostriches, of the shells of fishes." The wooden drinking cups were called "Mazers," and are often found in very fine designs; they were used by persons of good position. As late as 1667, Mr. Pepys, at his Christmas dinner party, had a flagon of ale and apples out of a wooden cup (wassail bowl), "A Christmas draught," he writes, "which made all merry!"

The wooden platter, or trencher, survived even a century later in circles boasting a high degree of "gentility." Horace Walpole, in fact, relates that he saw the Duke and Duchess of Hamilton at the head of their family table sharing a platter at dinner, "as a tribute of regard for past customs, and a sign of unity in old age." The idea is said to have prevailed that for each child in a family to use a separate platter was an exhibition of gross pride.

During the Sixteenth Century "treene" vessels were to some extent replaced by pewter, though the price of the latter kept it still beyond the reach of the humbler classes. In 1577, according to Holinshed, there were attempts at luxury in middle-class homes: "It is not 'geson' (*i.e.*, uncommon)," he says, "to behold generallye their great provision of tapestrie, Turkye worke, pewter, brasse and cupboards of plate: treene platters are exchanged for pewter, and woode spoones into silver or tin: for so comon were al sortes of treene vessels in old time that a man should hardly find four pieces of pewter of which one was peradventure a salte, in a goode farmer's house." (To possess even one silver spoon was an ambition of early birth in England, and one that was indulged in even when silver forks were considered a great luxury.)

Many beautiful and artistic pieces are to be found in old pewter, and the trade or art of the pewterer was a very flourishing one until the Eighteenth Century. The value of pewter during the Seventeenth Century was sufficient to produce imitations; in 1652 the Pewterers' Company of London prohibited its members from working with or for a Major Purling, who had invented a "faulse plat, called Silvorum, the which ware is ceased and deteyned by the Company." Most articles of domestic use were made in pewter, and it is even now to be met with in old-fashioned kitchens. There was one drawback to pewter vessels and dishes: all viands served on them so quickly became cold. Pewter also suffered from the fact that it could be so easily re-cast; the travelling pewterer, who went from house to house buying up damaged pewter to sell again for re-modelling, is responsible for the disappearance of many doubtless interesting old specimens. But it was largely the introduction, and speedy popularity, of "China" ware which during the Eighteenth Century led to a lesser demand for pewter, which has now practically fallen into disuse.

An interesting glimpse into domestic life in England during the reign of George III is afforded by the diary of Mrs. Papendiek, whose father and husband were Gentlemen-in-Waiting to the King. She has left us detailed notes as to the tableware of the day, which even in Court circles appears to our modern ideas to have been limited in quantity and coarse in quality! Mrs. Papendiek notes among the presents received by her on her marriage in

1783: "From the Queen a case of plate, which contained cruets, saltcellars, candlesticks, and spoons of different sizes, silver forks not being then used; also six large and six small knives and forks, to which Mamma added six more of each and a carving knife and fork." (These forks, like the knives, were probably of steel, as it was considered necessary merely to have silver spoons.) Mrs. Papendiek's statements with regard to the tableware of the day receive support from other records; for instance, in 1793, the "Young Ladies" attending the Select Boarding School of Mrs. and the Misses Eve in the Crescent, Birmingham, were requested to bring with them "a silver spoon and a knife and fork."

Elsewhere, writing of the year 1788, Mrs. Papendiek says: "Silver forks were only used by the nobility and foreign ambassadors, but silver-handled knives and forks were sometimes seen, and more often ivory and bone handles, or ebony and bone fluted, with silver ferrules. Forks had still only three prongs, so knives were made with broad ends for eating peas in summer, and the same of a smaller size for catching up the juice of a fruit pie, dessert spoons being quite unknown in our rank"!

Porcelain had some time previously been introduced into England, but its necessarily high price forbade its use becoming general; at the time of her marriage Mrs. Papendiek writes: "Our tea and coffee set were of common Indian china, to which for our rank there was nothing superior; Chelsea porcelain, and fine Indian china being only for the wealthy. Pewter and Delft could also be had, but were inferior." The manufacture of porcelain had at this time not long been attempted in England, the Chelsea and Bow factories having been started between 1740 and 1750; their productions constituted a vast improvement on the old English earthenware.

About the same time a method was brought forward for covering copper with silver in imitation of solid silver, which appeared decidedly superior to all processes hitherto in use. What we now know as "Sheffield Plate" had probably been known in England for a very long period (though no certain record exists); but in 1742 it was re-discovered and brought to public notice by Thomas Bolsover, a cutler of that town whose name has always been associated with the invention.

No durable imitation of silver was at this time being made; the value of silver then was many times that of the present day, and the relative value of money was far higher. In 1721-2 silver, with the then imposed duty, cost six shillings and a penny per ounce (New Standard). The "fashion" of it cost from eightpence to six shillings per ounce, while the usual cost of gilding was from two shillings and sixpence per ounce. In comparing these figures with the value of silver in the previous century the following extract from Pepys' Diary is of interest. He mentions receiving a present of a pair of flagons costing £100: "they are said to be worth five shillings an ounce, and the fashion of them five shillings an ounce more—some say ten shillings an ounce for the fashion. I am sorry to see the fashion worth so much and the silver come to no more." One can hardly help observing here that much the same idea prevails at the present day, many buyers of silver apparently grudging the cost "of fashion" as compared with weight. The cost of silversmiths' work at about the time of Bolsover's discovery is well shown in the invoices of the day, some of which have been preserved: among them those of Paul de Lamerie, the famous silversmith of London, who was renowned for his fine workmanship, and flourished during the earlier half of the Eighteenth Century.

Some interesting items may here be quoted: "A cruett frame, castors, branches and saucers," for example, costs 6*s.* 4*d.* per oz. for the silver, and 5*s.* 6*d.* per oz. for the "fashion," while the engraving of the entire piece is priced at £5 10*s.* To this were added eight "Cristal Bottles," costing 10*s.* each, and a "tronk" or box for the "cruett" at £3 10*s.* (According to the custom of the day the mint price of the silver was first quoted, then the fashion, engraving, etc.; this custom is still in use to-day in some cases.)

"A lardge silver Cupp and Cover" is priced at 6*s.* 4*d.* per oz., but it was fashioned at 18*d.*; the fashion of "Dessert Knifs, Spoons and Forks" was apparently reckoned at from 3*s.* to 5*s.* a piece, the "Knif blades" being added at 2*s.* each. "A Terrinne" could be supplied at the same cost as the Cupp and Cover, and fashioned for 18*d.*, but the fashion of Ladles or "Ragoos Spoons" amounted to 2*s.* per oz.

From other invoices may be gathered the cost of various repairs: "Planishing and burnishing a little Bason," "Supplying a new Spout to Coffee Pot," and "Burnishing a lardge Tea Pot." An entire service for the dressing table cost about £400; some of the separate items being: "A glass, a comme (comb) box, candlesticks, a juelle tronk" (with lock to juelle tronk), and, finally, "A tronk for all ye dressing plate."

From the above figures it is easy to realize that, in view of the growing desire for improved domestic utensils and tableware, the new substitute for sterling silver was of the greatest importance; "treene" vessels had been superseded by pewter; pewter was, in "genteel" circles, being replaced by "China ware," yet the artistic imitation of silver, suggested by the Sheffield cutler, attracted speedy attention because of the urgent and general demand for some style of tableware, both inexpensive and durable. Its popularity lasted until superseded by "Electro-plating," an easier and cheaper production, which came into use about the beginning of the reign of Queen Victoria.

It might not be out of place here to note the method of making solid silver ware at this period. All domestic articles—such as tankards (with and without covers), coffee pots, teapots (rarely made in silver as early as this), soup tureens, sauce tureens, sauce boats, and similar globular vessels, were what is called in the trade "raised," *i.e.*, the body of the article was raised into shape from the flat sheet of metal by the skilful and practised use of mallets and hammers applied to suitable stakes or "steadies," the sheet itself having been previously flattened from an ingot of silver, and stretched out to the required thickness and size. The great art lay in shaping from the flat sheet vessels of every conceivable shape and of the most varied dimensions; in the shaping moreover the craftsman must not fail to carry the same thickness of metal right to the top of his work, or, when necessary, he must arrange a rim of extra thickness at the bottom or top of the vessel according to its construction.

Take as an example the common tankard of this date: while it may appear to the uninitiated that the bottom has been made from a separate piece, it has never really been separate from the sides, though these may be at right angles to the bottom. It is seldom

that a seam is to be found on the body of any article of plate at this period, despite the extreme difficulty of raising some designs—the tankard even not calling for the exercise of the greatest skill when “raised” as described on the preceding page. (See Chapter IV on “Raising Sheffield Plate.”)

The mountings and members were usually made in quite a different fashion; they were “Cast,” *i.e.*, the molten silver was run into sand moulds. The designs in these moulds were made from wooden patterns in much the same way as is done in similar work at the present day. Such mouldings consisted of the mounts, handles, feet, and ornamentations on the articles enumerated above, though in some instances, such as candlesticks, the whole piece might be cast.

In making up Sheffield Plate the process of casting was impossible, but “raising” was employed under slightly different conditions. The earliest Sheffield Platers naturally employed the established methods of making metal wares and altered them to suit their new materials; and it is exceedingly interesting to observe how in their turn the processes used for the manufacture of Sheffield Plate influenced the making of the contemporary solid silver wares.

CHAPTER III

THE DISCOVERY IN SHEFFIELD

SHEFFIELD had long been famous for its cutlery; it is alluded to even by Chaucer, and the trade was undoubtedly of great importance in Queen Elizabeth's reign, for the then Earl of Shrewsbury made to Lord Burleigh a present of a "case of Sheffield whittles, being such fruictes as his pore countrey afforded with fame throughout the realm." The cutlers of London were by some considered to rival those of the Yorkshire city, but the latter were always able to maintain their position, and Sheffield continued to owe its growth and prosperity to its knives. The Cutlers' Company, which afterwards played some part in the plating industry, was founded in 1624; and cutlery continued to be the staple business of the city until the middle of the Eighteenth Century.

The population of Sheffield about the year 1600 was 2,207, "of which number," says a contemporary writer, "there are 725 which are not able to live without the charity of their neighbours: these are all begging poor"! In 1736 Sheffield could boast 10,000 inhabitants; a century later, the number had increased to 45,000, and the city had earned fame, not only for cutlery, but for silver and plated goods, and for works in iron and steel.

It cannot be denied that the development of the city of Sheffield was largely due to the discovery of the process known as "Sheffield Plating." It happened in 1742, that, in a garret of what was then called Tudor House, Thomas Bolsover, "an ingenious mechanic" (as he is styled in Hunter's "Hallamshire"), was repairing a badly cracked piece of plate—a knife, according to some authorities. Mr. Stratford, of Sheffield, states that he used a penny to "cramp" up the join, and accidentally allowed his work to become overheated, when he found that the silver and

copper had "fused" so firmly together as to be inseparable. It soon occurred to Bolsover that this accident might be turned to good purpose, and after some experiments he succeeded in producing an imitation of silver by beating out a thin layer of silver and placing it on a copper foundation, then fusing the two metals together by the action of heat.

This discovery was certainly made at the right time; there was an opening for an improved substitute for silver, cheaper than solid silver and better than pewter. Manufactures were at this time making rapid strides in England; trade was good; the nation prosperous; the introduction of machinery (applied to Sheffield Plating by Bolsover's successors) made a vast difference in the growth of the plating industry.

Bolsover himself does not appear to have claimed for his discovery the attention it undoubtedly deserved; for a short time he made small articles by his new method of plating silver upon copper; at a factory which he started on Baker Hill he produced buttons, buckles, and round snuff-boxes with "pull-off" lids. (Hinged snuff-boxes, according to Mrs. Papendiek, were not made until 1784, when a Mr. Clay, of Birmingham, introduced one of his own making to the Queen, a noted snuff taker!).¹ For a time it appears that Bolsover sent out a traveller with specimens of his wares, but he had evidently made an unfortunate choice: the man turned out an utter rogue, cheated his master right and left, and was all the while secretly in treaty with another firm.

Before long Bolsover turned his attention to the steel-rolling trade, to carry on which he started mills at Whiteley Wood, on the outskirts of Sheffield. The money which Bolsover had acquired by his invention, a not inconsiderable fortune, he appears to have lost at Whiteley Wood, where his capital was dissipated in building and enlarging his mills. He was often heard to say, that "when he began to build, his purse had no neck to it, and when he left off it was all neck"!

Bolsover's copper-plating process might apparently have fallen entirely into disuse had it not been for his apprentice, Joseph Hancock, who, foreseeing a fortune in "Sheffield Plating," took up his

¹ The Author cannot account for this statement on the part of Mrs. Papendiek, as hinged snuff-boxes were undoubtedly made at a far earlier date.

master's invention with industry and energy. His attempt proved highly successful; he began by causing great astonishment at his production of a saucepan plated inside! Afterwards he applied Bolsover's idea to the manufacture of numerous articles, some of them of a considerable size—teapots, tea-urns, coffee-pots, tankards, drinking-cups, candlesticks, sauce-boats, etc. Then, as he realized the special difficulty that hindered the expansion of his enterprise, he abandoned his plate manufactory and started mills for rolling out the plate. It is interesting here to recall that Hancock was a descendant of a family who, with one exception, perished during the Plague of 1666 at Eyam, in Derbyshire. Hancock's ancestress, having seen her four children buried within a few days, fled to Sheffield, where she had one son already settled as an apprentice. From him was descended Joseph Hancock, to whose credit is really due, if not the discovery, at least the success of "Sheffield Plating." He vigorously encouraged the plating trade in Sheffield, his rolling mills brought him a fortune, and in 1763 he became Master Cutler.

Until 1742 Sheffield had been entirely engaged in the cutlery trade; no silver goods were made there, but the growth of the plating industry produced a greater demand for genuine silver wares, and many of the firms engaged in the plating trade began to make articles of solid silver. This led to a desire for an Assay Office nearer than London or the other provincial offices, since the risk of transit and difficulty of safe packing were at that day very great; it was no easy matter to send a parcel of silver to London to be assayed, and it frequently returned showing signs of rough treatment, or fell into the hands of the "Gentlemen of the Road."

On one occasion Joseph Hancock had occasion to go up to London to lodge a complaint at the Assay Office with regard to the damaged condition of goods returned to Sheffield after assaying; there appears to have been some little jealousy on the part of the London authorities, and the Sheffield silversmiths occasionally received their goods back with signs of deliberately careless handling. Hancock had an interview with the Assay Master, and evidently came to a pleasant understanding with him; according to one tale he treated both Master and Scraper to a bottle of wine, in which ill-feeling was drowned!

Yet in view of her rising trade in silver, Sheffield determined to have an assay office of her own. In 1773 a Bill was laid before Parliament for its creation. Almost at the last moment Birmingham came forward with a similar petition, and the names of both towns appear in the same Bill. The negotiations with regard to the new assay offices were not carried through without some trouble; the authorities in London were at first greatly opposed to any fresh creations in the provinces; they made complaints as to the quality of the goods recently sent to be assayed; more iron, they said, was used in the snuffers than the legal allowance, and upon the new plated wares made in Sheffield were placed marks in the same position as the Hall Marks on solid silver; these plated articles, moreover, were so well made as to deceive the uninitiated into purchasing them as silver, the marks as a matter of course assisting the delusion. To this challenge Sheffield replied by confidently declaring that all their plated goods were sold as "plated"; they suggested also that the London authorities could not "come into Court with clean hands," as articles were frequently passed through the assay which did not come up to the legal standard for silver.

After much discussion on both sides, and despite all opposition, the Bill was passed in 1773, and assay offices were formally established in both Sheffield and Birmingham.

In 1784, an Amendment of this Act allowed the makers of plated wares to register their names and marks at the Sheffield Assay Office. There had been doubts as to their legal authority for so doing, since the act regarding the assay offices appeared to affect makers of solid silver goods only; the new law gave permission for all platers "within 100 miles of the town of Sheffield" to register their names and "devices" at the Sheffield Assay Office. The omission of all allusion to Birmingham is most remarkable, the result being that all Birmingham platers (their town lying within the 100 miles limit), were forced to register their names and marks in Sheffield. They protested in vain for about forty years; they made many attempts to evade the law, and were duly fined by the rival Yorkshire town.

In 1824 Birmingham endeavoured to bring before Parliament a Bill for the registration in Birmingham of the names of platers;

this Bill was withdrawn in the face of much opposition. Henceforward, however, the Birmingham platers considered themselves absolved from any further attention to the act of 1784, and ceased to register their names at Sheffield; after the year 1824 no names of Birmingham platers are there found enrolled. The legislation concerning the new assay offices had this result: the established requirements for sterling silver were more strictly exacted in London in consequence of the revelations of previous laxity; thus Sheffield and Birmingham may justly claim to have raised London silver to the legal standard. (See Chapter XXII.)

To return to Sheffield Plate. In a few years after the discovery many prosperous firms might be counted in Sheffield. In 1762 the noted firm of Tudor, Leader and Sherburn was founded, and was most successful in the application of horse-power to the rolling process; their mill was in the Market Place, and the business survived, under various changes of name, until 1812. By 1765 the plating trade had become of considerable importance in Sheffield. To quote Mr. Samuel Roberts: "There were about six houses engaged in it, and almost all kinds of goods were made of plated metal which had hitherto been made of silver. As the trade was completely new to Sheffield, where no similar goods of any metal had been made, workmen at all qualified to make them had to be sought from London, York, Newcastle, Birmingham, etc. Those who chose to come were, of course, often very indifferent characters, many of them very bad ones; therefore during the first twenty years the journeyman platers were, as a body, the most unsteady, depraved and idle of all the other workmen. They were, in fact, in many respects, a pest to the town. The masters could neither do without them nor obtain better. They were therefore forced to give them high wages, and to wink at their irregularities. From this cause the masters were continually enticing the workmen from each other's houses, giving them money to hire with them, and letting them get into their debt as a kind of security. There were in consequence frequent disputes between masters and workmen, and between masters and masters about them; so that they almost occupied the time of the patient Mr. Wilkinson and the impatient Mr. Athorpe during one day in the week, in the little justice-room at the Cutlers' Hall."

The workmen first employed in the plating trade were copper braziers and silversmiths; and from other records it may easily be gathered that Mr. Roberts' title of "Pest to the Town" was fully earned. In fact, they seem to have been the type of men known in the trade as "Birds of Passage"—men who never settled long to any trade, but drifted from place to place wherever higher wages appeared obtainable. It is stated that at one time they succeeded in demanding such high pay, that two of the former braziers kept hunters, while their less fortunate masters went on foot; others employed a hair-dresser, who had orders to attend them in working hours, with all his paraphernalia—powder and all.

It is pleasant, however, to record that these troublous times did not last long; gradually the work passed into better hands, and the men employed could be drawn from a more reliable class.

About this time many of the Sheffield cutlers abandoned their old craft and embarked in the new plating business; they even registered some of their lads as apprentices to the cutlery trade in order to avail themselves of its attendant laws and privileges. In after years this custom caused a good deal of discussion when the lads, so apprenticed, claimed the Company's Freedom; the Cutlers' Company disputing it on the plea that they were not qualified as cutlers, having only learnt the plating trade.

Before long the new plated ware began to attract the attention of men of culture and refinement. Horace Walpole, in a letter to Mr. Montagu, in September, 1760, writes: "As I went to Lord Strafford's, I passed through Sheffield, which is one of the foulest towns in England, in the most charming situation. There are 22,000 inhabitants making knives and scissors; they remit £11,000 a week to London. One man there has discovered the art of plating copper with silver. I bought a pair of candlesticks for two guineas; they are quite pretty."

The industry soon spread to Birmingham and London, in which towns it became of considerable importance; it was also made in Nottingham. The first-named was specially noted for the making of plated buckles and buttons, for which several processes were patented and used. The celebrated Soho factory was founded in 1764, and copper-plate was both rolled and made up there for a considerable period. The new ware was also made in

Ireland, and even in Scotland; in Dublin alone many fine pieces were produced. Sheffield Plate found a ready market, not only in Britain, but throughout Europe, and several continental countries were tempted to manufacture it themselves.

Many patents relating to Sheffield Plating were taken out by inventors during the latter half of the Eighteenth, and the early years of the Nineteenth Century; special processes were used for protecting the angles and joints of plated articles, for plating cutlery, for buttons and buckles, for wirework, for gilding, etc. The process was also tried with metals other than copper. In 1790 John Whitworth took out a patent for plating silver on block tin; but this differed from genuine "Sheffield Plate." Attempts were also made to rival the invention of Bolsover by various white metals as substitutes for solid silver: James Dixon, of Sheffield, at his works in Cornish Place, made a certain success by adapting and improving a "Britannia Metal"; William Tutin, a Birmingham plater, invented a white metal called "Tutania," and other platers varied their goods according to ideas of their own. During the last years of the manufacture, German silver was used as a foundation by some makers in place of copper, and firms are described as "Platers on White Metal" in the directories of the day.

There is nothing more fascinating than to watch the trend of fashion in articles of by-gone days, and a connoisseur has little trouble in deciding the date of any piece under his observation. Old silver, with its scheme of Hall Marks, has been of great service in closely defining the dates of English Art. The patterns used in the manufacture of Sheffield Plate were of course contemporary with those in silver; yet unless the change in workmanship as well as fashion is carefully studied, it is easily possible to miscalculate. Many pieces of plate were somewhat in fashion for fifty or sixty years, or at least were made for that period; and examples of "Old Sheffield" which are contemporary with the solid silver wares of 1750 could have been made as late as 1820.

There are two distinct periods marking the manufacture of Sheffield Plate. The first, which might usefully be called the "Copper Mount Period," extends from the time of Bolsover's discovery down to about 1790; the second, or "Silver Mount

Period," from 1790 until the close of the manufacture. Sheffield Plate until 1790 was entirely made from "Copper-plate," and no trace whatever can be found of the silver mounts characteristic of the later period.

To a connoisseur in English Art the above dates would be sufficient proof that during the First Period both design and workmanship were of the finest possible quality, and he might incline to dismiss all specimens of later date as unworthy his consideration; yet the ornate designs that followed the unfortunate change in fashion at the close of the Eighteenth Century necessitated greater skill and more careful handicraft. The clever and masterly treatment, not only of the silver mounts, but of the whole construction, quite atones for the elaborate styles which prevailed during the later period.

CHAPTER IV

PROCESS OF MANUFACTURE

First Period—1750-1790

OF the earliest processes employed in the manufacture of Sheffield Plate, no definite record survives; but it can be authoritatively stated that the base metal was always copper, whose natural affinity for silver has long been recognized by chemists and metallurgists. Copper was used as the base metal for Sheffield Plate until the discovery of "German Silver." The earliest makers appear to have used pure ("virgin") copper, despite the prevailing belief that it is not possible to reduce pure copper to a sufficient hardness; yet it was used by many of the ancient nations even for their weapons of war, though according to some authorities a quantity of tin was added. Pliny gives as a recipe for hardening copper the addition of one-third of second-hand copper, *i.e.*, copper that has been in use and bought up for this special purpose, "for," he says, "it is a peculiarity of this metal that when it has been some time in use, and has been subject to long-continued friction, it becomes seasoned and subdued as it were to a high polish." The modern explanation of this is that "second-hand" copper becomes more or less mixed with iron during its smelting, and while in use it acquires a certain amount from contact with iron vessels, etc.; the small quantity thus added is quite sufficient to render it harder than virgin copper.

Copper was also used in ancient times for articles of domestic use—knives, razors, etc., and for agricultural implements: the Etrurians invariably marked their city boundaries with a copper ploughshare. In rather later times we find Scandinavian swords made of copper with an iron edge.

By successive processes of melting, in any case, it is possible

to produce copper of a sufficient hardness for plating with silver; and in some instances at least the pure metal alone was used. It was, however, often alloyed with a slight quantity of brass, in the proportion of 2 lb. of brass to 12 lb. of copper.

The combined metals, together with a small quantity of borax, were first melted, and usually run into a flat iron mould, thus forming an "ingot." When perfectly cool, the ingot was removed, and appeared as a block of copper somewhat in the form of a brick, though not quite as thick. Its size must depend on the kind of goods for which it was intended: Bolsover for his buckles and boxes could have required but very small pieces of copper; but the average size of an ingot was 3 inches wide and $1\frac{1}{2}$ inch thick by any length.

The side to be plated or covered with silver was first of all very carefully examined; all "fash" or roughness must be removed to ensure a smooth clean surface, absolutely free from blemish, and clear from even a finger-mark.

Preparing the Silver Plate

On the top of this copper ingot was laid a piece of silver. The quality used contained very little alloy: in some special cases, indeed, it proves to have been practically virgin silver. It was formed in the same way as the copper ingot, but reduced to the necessary thickness, which, to use a simple illustration, varied from the thickness of a present-day florin to that of a five-shilling piece. The proportion of silver allowed was, as a rule, about one-twelfth the quantity of copper. Its surface area was slightly less than that of the copper ingot. Chaffers reverses these dimensions, and it appears probable that some of the earliest makers did allow the silver to overlap the copper in order that the edges of the ingot might appear to be solid silver. In this case, the copper would first be washed over with a solution of nitrate of silver (*lunar caustic*), a plate of silver of a rather larger size would be laid upon the copper and the edges turned over. The two metals would be heated to a dull redness, and rolled in the customary manner. This method, however, does not appear to have been much used, as each piece of copper plate would have to be made separately,

and to the exact size of the intended article: the turned-over edge must also create difficulties with regard to shape. There are to be found salvers that were made in this way, being turned over to the extent of half an inch on the back, though this had been tinned in the usual way. Supposing the more general process to be used, the silver was first scraped and cleaned, one side being specially prepared and brightened. It was laid with its bright surface downwards upon the copper ingot. The two metals were then put upon a flat stake and hammered all over until they met evenly and completely. These stakes were usually made from stone, of a kind similar to paving stone; they were placed perfectly flat and kept to an exact level by the aid of a plummet.

A metal plate, slightly less than the ingot in surface area and about one-sixteenth of an inch thick, was then laid on the top of the silver, over which had been brushed a preparation of whiting, which prevented the plate adhering to the silver when in the furnace. Above this again was usually set a stout iron bar, nearly the length of the ingot, and about three-quarters of an inch thick. The whole was then bound tightly together with strong iron wire wrapped round at intervals of an inch—lastly, the edges of the silver were touched with a solution of borax and water.

For purposes of economy many pieces were plated upon one side only: insides of coffee and hot-water jugs, for instance, would be left unplated: but should plating on both sides be necessary, the under surface of the copper would be prepared and coated with silver by the same process. Also for further economy, when it was necessary to plate both sides, one side would not be coated with silver as thickly as the other (being exposed to less wear), as in the case of the insides of tea-pots, cream ewers, sugar baskets, and similar vessels.

It may be stated with certainty that the earliest makers did not plate on both sides: and the supposed reason is that they had not learnt the art of such successful plating. Mr. Arnold T. Watson, in an interesting publication entitled, "The Sheffield Assay Office," says that for the first sixty years the plating was done on one side only: half this number of years would be more correct. In the early stages of the manufacture there is no question but that they plated only upon one side, and considerable ingenuity

was called forth when double-plating was absolutely necessary to place the metals back to back. There is no accounting for the extent to which French Plating was used in the manufacture of early Sheffield Plate (see Note on "French Plating"). Many pieces have been found where the silver has been applied by a method similar to this, yet differing slightly in detail, one thin layer of silver being fixed or made to adhere by means of tin or soft solder, either before or after the article was made up.

Firing the Plate

It may be presumed that in the earliest days of the manufacture, when only single-plating was known, the ingot was fired upon an open hearth: at a later period the furnace, usually of brick, was built with an exceedingly low roof. A clear charcoal fire was prepared, and when it was in a state of steady ignition, and the roof in a white heat, a regular temperature being maintained with the bellows, the ingot of combined metals was placed in the furnace so that the heat would be equally distributed. The borax, acting as a flux, expedited the melting of the silver, and at the exact moment of the union of silver and copper, the ingot was carefully and quickly withdrawn, and placed in a flat position until perfectly cool. A successful firing required considerable skill, for unless withdrawn at the right moment, an entire ingot must be spoiled. Having been allowed to cool, the iron bar and metal plate removed, the ingot was placed in alum and water (in the proportion of $\frac{1}{2}$ lb. of alum to 2 quarts of water), and boiled for about ten minutes: after which it was scoured with Calais sand and water. By these means it was thoroughly cleansed from any remains of borax and from any impurities.

Forge-hammering and Rolling

Having thus prepared an ingot of copper and silver, it was necessary to reduce it to a certain thickness: the earliest method employed was the use of the forge-hammer. The ingot was laid on a perfectly flat stake or anvil, or on any perfectly solid flat surface, while a hammerman beat it with a forge-hammer with steady

and regular blows. By gradual and careful hammermanship an ingot could be stretched out to almost any desired thinness, and the earliest makers of Sheffield Plate, for their small snuff-boxes and buckles, employed this method only. But it was soon found impossible to forge-hammer larger pieces of plate without spending an enormous amount of time and labour. This may have done much to discourage Bolsover from making any great success of his invention.

It was Joseph Hancock who solved the difficulty by suggesting the introduction of rollers. Hand rollers were first brought into use: the ingot was so far reduced by hand-forging, and then placed between steel rollers for further reduction. Hancock very soon deserted the manufacture of plated wares, and founded at Old Park, near Sheffield, a mill, where he commenced rolling plated metal for the makers already established in Sheffield. There is no record of the power that Hancock employed at Old Park; he probably made use of the water-power easily obtainable from the streams in the neighbourhood. It soon became quite usual not only for makers to send their ingots to be rolled, but as the mills made and supplied copper-plate, a maker could buy plate ready-made in all its different forms and qualities. In 1762 the firm of Tudor, Leader, and Sherburn commenced to manufacture plated wares, and employed horse-power for their rollers.

The amount of rolling to which the ingot was submitted varied according to the thickness of plate required; it was first rolled in the mill under heavy steel rollers and reduced to a certain thickness: on its return to the workman it might be hand-rolled to a greater or less extent in view of the purpose it was destined to serve. Probably the thinnest "copper-plate" is that used for the lining of horn drinking-vessels; it is possible to reduce the silver to the thickness of the three-thousandth part of an inch; and one ounce of silver is the usual quantity rolled to cover a surface of three square feet.

On the other hand, pieces may be found where the coating of silver is remarkably thick; a salver may be quoted whose owner pointed out the *solid silver* middle, and *plated* edge! The deception was quite natural; so great a depth of silver had to be cut through before the foundation of copper was revealed.

Annealing

The frequent and continued hammering and rolling of metals, especially of copper and silver, renders them very hard and brittle: to soften them it is necessary to apply heat until the metals become a dull red, and to allow them afterwards to become cool again. This process is called "Annealing" in the trade (or "Nealing," to use the older form of the word).

For the actual annealing a charcoal fire was made in an open hearth, the heat being kept up by the aid of bellows which were worked with the foot. Lardner states that in view of the importance of withdrawing the ingot from the fire at the right moment during the annealing, the workmen used the following test: they blackened the metal in the smoke of a lamp, and while holding it over the fire, watched for the disappearance of the fuliginous film, for at that moment the metal must have become sufficiently softened or "annealed." Great care must be exercised lest the blaze of the fire should touch the ingot while exposed to its heat.

There is another old trade term for "annealing," that is, "lighting": the alloy in the plated ingot was apt to give too dark a tinge to the work in the course of its construction, or, as the expression was, its surface was too "fiery." To reduce this vivid colour the plate was frequently annealed; the colour became lighter under exposure to the charcoal fire; hence the term "Lighting," often used instead of "annealing."

This fiery tinge has in modern days been much covered up by electro-plating, especially in the making of solid silver wares: when an article has been practically completed, many manufacturers, in order to remove all blemishes, will electro-plate it, thus covering all defects; this method is perhaps more peculiar to Sheffield than anywhere else, and cannot be considered satisfactory as it must give the article the appearance of being electro-plated, since the colour is not the same as that which the expert usually associates with fine silver work.

Blisters

Occasionally, even if the greatest apparent care had been taken, minute spots might be found where the copper and silver

had not completely joined. During the rolling and annealing such spots would become visible and form into blisters. If that portion of the plate where such a blister occurred could not be avoided in cutting the plate to shape, the blister must be pricked to allow the imprisoned air to escape: the part affected must be heated, and the blister rubbed down with a steel burnisher until it adhered to the copper or base metal. Should, however, the defect remain unnoticed until after it had burst and become scaled, it was necessary to repair it by a method known as "French Plating."

French Plating

By this process the spot to be repaired must first be thoroughly cleaned and smoothed down; then "matted," or roughed up again with a matting tool, as a slightly rough surface made a better foundation for the new coating of silver. Leaf silver reduced to the thinness of foil was then laid on, leaf after leaf, and rubbed in with a steel burnisher under the action of a gentle heat until the spot was entirely covered. This repaired the defect very well, though a trained eye might detect the joining. For the repairing of any small defect each workman was provided with a "book" of silver leaf for use as he might require, and he heated the work by means of a mouth blow-pipe, burnishing the leaf on to the article while hot. The durability of French Plating depended entirely upon the number of leaves used: ten was an ordinary quantity for repairing defects as described above, and though frequent washing and handling proved a severe test, this number was as a rule sufficient for the purpose.

Quite early in the history of the manufacture of Sheffield Plate, French Plating became a separate trade. Though large manufacturers might employ French Platers of their own, many of the smaller relied on an outside workshop where a speciality was made of this branch of the trade. There is still living in Birmingham a former employé of a plating firm whose duty, as a lad, it had been to carry defective pieces to be repaired. In case a piece was too much damaged to be repaired even by French Plating, the silver was entirely planed off the copper, and the plating process repeated from the beginning.

Raising

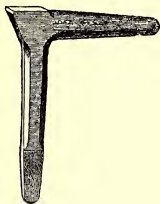
The ingot of combined metals was now reduced to a sheet, technically called "Copper-Plate." A maker would keep in stock sheets of different sizes, single or double plated; the thickness of the silver on these plates would vary according to its destined use, one side of the sheet being frequently more thickly coated with silver than the other. Some firms made a speciality of supplying sheets of copper-plate to the smaller makers, but many even of the larger firms found it satisfactory to buy their plates in this way. When the craftsman or "raiser" had obtained a piece of plate cut to the size of the body of the article required, much would now depend on the shape of this article—whether it were to be straight-sided (a teapot, for instance), or skittle-shaped, or deep globular—a different method was employed in each case.

A raiser's tools consisted chiefly of the following: a jack or "horse," raising mallets, "steadies," raising stakes, planishing hammer, bellying hammer, backing hammer, sand cushion. Take first the simple straight-sided oval teapot (see Plate XXXIX), the style first made in Sheffield Plate. The workman required a piece of plate $3\frac{1}{2}$ inches high, and about 12 inches long, from which to shape the sides. He bent his plate round till the two ends joined, forming an oval body with the aid of a side stake (see illustration). He then shaped the ends till they accurately dovetailed into each other, to form a good firm seam, known technically as a "cramp." Some makers did not find it necessary to make a dovetailed seam, a straight one proving entirely satisfactory, especially in smaller work. One Birmingham maker, by a process of his own, made a very successful dovetailed seam, which on the outside appeared perfectly straight.

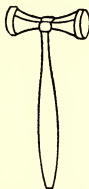
The ends were accurately placed together, and the sides bound round with iron wire. The join, both inside and out, was covered with borax, and filings of silver solder were spread exactly on the seam. (Silver solder is always of a lower standard than the quality of silver to be soldered, and therefore melts more quickly.)

The whole was then placed over a strong fire, and as soon as the solder ran into the join (its action being facilitated by the

borax) it was withdrawn, and allowed to cool gradually. Immense care was required during this firing, as, supposing the heat were not evenly distributed, the silver must run in places, thereby exposing the base metal or copper. The workman was continually on the look out for such an accident, and it did not improve his



SIDE STAKE.



PLANISHING HAMMER.

temper, should (to use the craftsmen's proverb) "Alexander show his face!" One imagines that this singularly apt expression was suggested by the references of St. Paul to Alexander the Copper-



SAND-BAG.



ROUND-NOSED WOODEN MALLET.

smith of Ephesus, whose evil conduct was a source of repeated trouble and annoyance to the Apostle.

This part of the pot would not again be subjected to a strong heat, and it could now be finally hardened. The seam, indeed the entire plate, had been softened by the extreme heat necessary for the making of the seam; the work was therefore placed on a side-

SHEFFIELD PLATE

stake, and, with the aid of a planishing hammer (see illustration), the whole surface was hammered over thoroughly to harden the metal.

In making a skittle-shaped teapot, the raiser cut a round plate of the necessary size, and placed it on his sand-bag (see

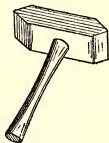


FIG. A.

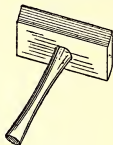
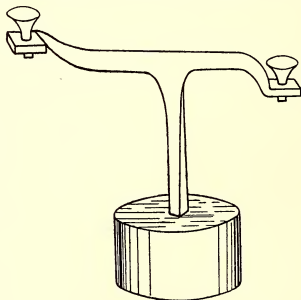


FIG. B.

illustration), a circular leather cushion filled with sand, usually about nine inches in diameter. Using a round-nosed wooden mallet (see illustration), he proceeded by frequent blows to "dish"

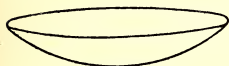


JACK OR HORSE.

the plate; that is, he made a hollow in the centre, causing the sides to rise, till a shallow vessel was formed.

Removing this from the sand-bag, he beat the upper edge in with the boxwood mallet (figure A), curving it inwards very gradually, finishing with a mallet shaped as figure B. The method

of doing this may be described as follows:—The raiser selected a “jack” or horse, on the end of which was already fixed a “raising stake” of suitable size and shape. The jack or horse in this case was an upright piece of iron driven into a block of wood, with an arm extending at right angles, on the end of which was a small square opening, to which could be fitted the “raising stakes.” These stakes, or “heads,” were of almost every conceivable size and shape, and were made of steel. They were placed beneath or inside the work, so as to resist the blows of the hammer, and give the hammerman a foundation on which to shape the metal plate (see illustration).



First Course.



Second Course.



Third Course.



Fourth Course.

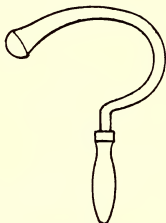
DIAGRAMS OF COURSES.

To complete the skittle-shape, the raiser must keep the edge of the half-formed vessel correctly in position with one hand, and strike from the outside repeated blows with the raising mallet at a regular distance from the extreme edge, moving the vessel round at each blow until a circle was completed. This hammering in a circle was termed a “course”; and each course bent continually inwards the upper edge of the vessel until it assumed the desired shape, *i.e.*, it appeared as a round squat body with a hole on the top of a sufficient size on which to place the lid.

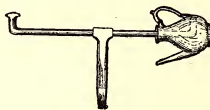
Many courses might be necessary in raising a teapot of this shape, the number varying according to the workman's skill. The first two or three courses might give an upright straight turn; the next a slight inward curve, and so on (see illustrations). The pot

was finished to shape with the "bellowing hammer" (see illustration), used from within, while the work was held on the sand cushion, any acute angles being beaten away with the aid of a bellowing stake, and all traces of the "courses" removed. Thus the entire pot was "raised" without a seam. It was usual to raise all shallow vessels in this way from one piece of plate, without a join; sugar basins, cream ewers, sauce boats, soup tureens, sauce tureens, etc., are frequently met with that have been so raised, the designs of course being shallow.

To raise any article by hand without a seam was not an easy task, nor quickly completed. Each stroke of the hammer must be made to "tell"; it must be accurately directed to fall upon the



BELLOWING HAMMER.



BELLOWING STAKE.

stake beneath the plate. This method was not always employed even in making a skittle-shaped teapot; some makers would raise the body in two halves, upper and lower, and, to conceal the seam, would run a band round the centre and solder it on. One of the most difficult articles to raise in one piece was the oblong *entrée* dish, the long straight sides and rounded corners being very difficult to make and match exactly. Few *entrée* dishes were, however, raised in this way, dies being chiefly used. (See Chapter VII.)

Vessels of a deeper globular shape—tea-urns, coffee-pots, hot-water jugs, some designs in teapots, sugar basins, or cream ewers—could not be raised without a join. To make a teapot with a deep body, the raiser formed from his plate a tapered tube, or "neck," somewhat higher than the intended article, and joined up the seam

in the manner already described in the case of the simple oval teapot. The neck was bent nearly into shape by a series of courses, the body was then beaten to shape by a mallet from the outside, and by a bellowing hammer from within. Finally, the top of the neck was held on a wooden stake or dishing block, and curved outwards with the "backing hammer," all traces of the courses being removed on the bellowing stake.

In raising articles by hand it was most essential that the hammer strokes should be level and evenly distributed to produce a uniform surface and not a series of irregular indentations. Examine closely on the inside a hand-raised teapot: there will be found the marks of the planishing hammer running right round the body in even rows. From these may be gathered some idea of the number of strokes necessary. At first light blows were given with a raising mallet of wood or horn, afterwards the hammer was covered with a soft woollen material, or with leather. Finally, upon the hammer's face was fixed a piece of highly polished steel, and with this the raiser gave his finishing touches.



TYPE
OF STEADY.

During the raising the raiser kept his bench carefully covered with green baize or other suitable soft stuff, to protect his work from dents or scratches. Extreme cleanliness of all tools was also necessary: the "steadies" (used in the making of flat work), in particular, being kept absolutely free from dirt. In many factories, not only were they always covered when not in use, but it was the duty of the apprentice to keep them clean for the raiser, and in the case of the finishing steady, to hand polish with rouge every day.

Time being in those days of less account than now, the raiser was far more careful in raising his work exactly to size and shape: for each article he would make a set of metal scales ("through scales and side scales," to use the technical terms) on which to measure accurately his work as it proceeded. It was not unusual for a careful craftsman to spend a whole day in the making of these scales before attempting to raise a piece: nowadays a roughly-cut paper scale is often considered a sufficient guide.

The amount of wear which hand-raised articles will undergo

is truly astonishing: they are tempered almost like a piece of steel, while not an ounce of unnecessary plate is used. It was not until early in the Nineteenth Century that silver spoons were made *entirely* from dies, and it is worthy of note that spoons made in the latter half of the Eighteenth are usually half the weight of those made in the previous century. Take, for instance, a dozen dessert spoons dated 1840; these would weigh 20 oz., whereas a similar number made in 1780 would only weigh 12; and the latter, moreover, would stand far more wear than those of the later date. They are also more pleasant to use, being lighter and more agreeable to the touch; yet at the same time they are undoubtedly more durable than those of double the weight. Unfortunately the buyers of to-day demand "weight" not "work": a true connoisseur prefers work and design to "ingots of silver" and unnecessary metal, since he realizes the truth of the oft-repeated proverb:

"By hammer and hande
All thinges doe stande!"

CHAPTER V

PROCESS OF MANUFACTURE—*continued*

Addition of Members

HAVING shown the different methods of forming the body of a teapot or other globular vessel, it is necessary to return to finish the simple oval teapot already mentioned.

Its spout would next be made; on a teapot of this description it would be shaped as a small round tapered funnel, the workman fashioning it from a flat piece of metal, and hard (silver) soldering the join in the same way as had been done with the seam in the side. Having carefully fixed on the exact spot where the spout should be fitted to the body of the teapot, an oval ring of holes was drilled, with two in the centre, through which the tea could pass when the pot might be in use.

The sockets, in which a handle must be fixed, were next made; these might be stamped out of a die in two halves, or turned up out of the flat; in either case they were joined with silver solder. The top socket was usually larger than the lower as it must carry the thicker part of the handle.

Beneath the handle-sockets were usually placed ornamental shields, the top one larger than, but shaped to match, the lower socket; their outer edges were often decorated with beadwork to match any decoration that might subsequently be added to the teapot. These shields were placed over the seam at the back of the teapot, not only to strengthen that part of the pot, but to cover the join, which at its best can be distinctly observed. They also prevented the sockets indenting in any way the body of the pot with the weight of the handle.

It can easily be noted that, especially on Sheffield Plate of the First Period, whenever the member to be soldered is sharp and of

a small surface, a double thickness of ornamental metal is placed between the two surfaces; this, while it has the appearance of an ornament, has really this special purpose. Sometimes no shields were fixed under the sockets; in this case either the members or mounts were made with a very broad surface, or so placed that no pressure or weight was at all likely to dent that part of the article to which they were attached.

The seat and lid were next made. A piece of plate was cut to the exact size of the top of the body; from its centre again was cut a large oval piece leaving a flat oval ring about $\frac{1}{2}$ -inch broad. Next was cut a piece to form the lid; and, presuming this was designed to be quite flat (as in many teapots of this period), the plate would be cut to the exact shape of the piece removed from the oval ring, but $\frac{1}{8}$ -inch larger. If the lid were to be domed, the workman would first hammer his piece of plate to shape and then cut it to the exact size required.

About $\frac{1}{2}$ -inch from one end of the lid a piece was cut somewhat in the form of an arc, to this the bearer of the hinge was afterwards fixed.

The bottom of the teapot was next made; and on the pot under review it was done in the following manner: an oval disc was cut slightly larger than the inside oval area of the sides—a small margin was turned over, about $\frac{1}{16}$ -inch in breadth, and it was then made to fit accurately inside the bottom of the pot, the margin forming a surface for soldering.

Soldering

Hard Solder consists of silver of an inferior quality; and, as is well known to all workers in metals, the lower the quality of the silver the more quickly it will melt. Hard solder is much preferred in the joining of metal articles, as by its use the parts are so securely united as to be almost inseparable save under exposure to an immense heat. It was, however, impossible to use much hard solder in the making up of articles in Sheffield Plate, as the heat necessary was very great, practically the whole of the work requiring to be made red-hot. This continued re-heating was found impracticable, because it must soften the body of the article

which had already been hardened by careful and complete hammering, and which could not be satisfactorily re-hardened. Again, under the heat required for silver soldering, there was always the risk of causing the silver to run and expose the base metal. Yet in some parts of the construction it was essential to use hard solder; for instance, when the surface was so small, or so narrow, that it could not be treated successfully with soft solder. In the joining of a seam in the straight-sided teapot already described, no large soldering surface could be obtained, and it was easily possible to re-harden the whole work by hammering after the seam had been soldered. When hard solder was used in seaming any of the small members or mounts, it was always before the member was fixed to its article; for instance, on the spout, the knuckles of the hinge, the sockets, or on the ornamental decorations.

The actual soldering was done upon an open charcoal hearth; the work was laid in an iron pan, which could be raised up or down as required. In the bottom of the pan was a hole, which could be made larger or smaller at will, and the work was so placed that the heat of the fire could (through the aperture) reach the particular spot to be soldered.

Soft Solder is composed of lead, with a slight mixture of tin; it is used because very little heat is required to melt it. It does not enjoy the best of reputations among silversmiths of to-day; to many jewellers it is known by the contemptuous name of "Soft Tommy." But let the modern manufacturer examine a fine specimen of "Old Sheffield," and he will quickly discover what a useful purpose his despised "Soft Tommy" has fulfilled!

In order to employ soft solder with any degree of success, the surface must be large in proportion to the size of the work, and in the making of Sheffield Plate an astonishing amount of skill and careful designing were called forth in order to secure a sufficiently large soldering surface without spoiling a design, or giving the impression that soft solder had been used. The amount of wear to which articles thus soldered can be submitted is also a matter for surprise and admiration; the united parts will adhere when a vessel has been not only long in use, but even when, through rough treatment, it has been battered almost out of all recognition.

The method of attaching members and mounts to Sheffield Plated articles, by means of soft soldering, has this one drawback: should by any accident an article be subjected to a severe heat (an empty teapot, for instance, left too near a fire), the handle and mountings are liable to drop off, owing to the melting of the lead under exposure to the excessive heat. Yet, save for such possible accidents, Sheffield Plated articles will, as before said, stand a surprising amount of wear and even rough usage.

Hinges

The knuckles of the hinge were cut from a piece of plated tube (made in the same way as wire), but to retain the hole a spit had been placed in the middle while the wire was fixed. The tube was cut to the length of each knuckle, as a rule in lengths varying from $\frac{1}{4}$ to $\frac{1}{2}$ an inch. When knuckles of the latter length were used on a teapot lid, only one would be attached to the lid and two to the bearer, one at each end. Some makers fixed two knuckles on the lid and three on the bearer.

To fix a hinge strongly and correctly, the workman took a piece of plate $\frac{1}{8}$ inch thick by $\frac{1}{4}$ inch broad, and the length required according to the width of the teapot lid; this was called the "Bearer." On one of the narrower sides a circular groove was formed, and in this the bearer-knuckles were fixed with silver solder in their respective positions. The knuckle or knuckles were fixed to the lid bearer in the same manner in the reverse position; the two sets of knuckles were then placed together, and a joint-pin run through the hole or tube in the knuckles so that a movable joint was formed. The arc-shaped piece cut from the lid was now placed on top of the bearer, close to the knuckles, but not so near as to prevent the proper working of the joint; these parts were now fixed together with soft solder, the lid itself being soldered to the reverse bearer in the same manner.

The whole was then placed in position on the seat, when it would be found that the lid formed an oval which protruded about $\frac{1}{8}$ inch over the aperture in the teapot; the bearer and arc-shaped plate were then soft-soldered to the seat. To successfully cover the bare edge of the lid (when the teapot was closed), bead-work or other decoration was applied to the seat in an oval strip right round

the lid, close up to the edge; this gave the appearance of a ledge on which the lid rested. Another method was to place inside the seat a piece of plated metal about $\frac{1}{2}$ inch broad, of which half extended beyond the surface; the lid was then made to fit this ledge which ran round the whole circumference of the oval mouth of the pot; the bead-work could be dispensed with in this case, since the lid fitted flush with the seat, the hinge-knuckles only protruding above the surface. Yet another method, and one seldom seen save on the most expensive work, was to omit the protruding knuckles, and obtain a perfectly even surface, so that it became almost impossible to detect the hinge when the teapot was closed. The caddy shown in Plate XXVI has such a hinge. To do this successfully the knuckles must be flat at least on the top, and they were countersunk to the level of the surface. This method of attaching a hinge entailed much labour even in making up solid silver wares, and was far more difficult in Sheffield Plate. Such a joint is considered the most perfect, and a teapot thus fitted becomes very costly. The presence of a base-metal rendered its attachment to plated articles very difficult on account of the soldering; hinges of this description were, as a rule, only applied to teapots and tea-caddies. (See Plate XXVI.) So costly is the workmanship of this hinge when made in Sheffield Plate, that many makers preferred to make it entirely in solid silver. (See Plate XXVII.)

A hinge of different make was usually fixed to coffee-pots and hot-water jugs; to name this the "Book Hinge" will probably sufficiently describe it. (See Plates III and XIII.) It may be found in several sizes, and is generally more or less elaborate in construction and design. Only one peculiarity attaches to these hinges when found on Sheffield Plate—the ends of the joint-pin are usually carefully covered with a slightly ornamental silver cap. Though on early specimens these are omitted, this was necessary to conceal not only the unsightly ends of the pin, but also the ends of the joint where the base-metal was left bare.

There were many other methods employed by the various Sheffield Platers in making hinges; but it is easy to detect whether a hinge is made by a genuine old method by keeping in mind that the hinge was an intricate piece of work, and the manufacturer's main object was the successful covering of the base-metal. There

was no satisfactory method of covering up the edge of the base-metal with silver, the hinge must therefore be fashioned so that the base-metal could not be seen. In a stock pattern of hinge used by many makers, the bearers were struck from a die, and were consequently hollow when applied to a vessel, the knuckles being silver-soldered in the usual fashion. Where the knuckles are joined to the bearers, the silver solder can be traced; the edges of the bearers are rounded and somewhat sloped, showing that the sides have been raised by the aid of a die. Had the modern method of plating been invented, these bearers could have been made from a solid piece of metal, and the whole plated by electro-deposit. Hinges made as described above are frequently met with, especially on Sheffield Plate made after 1800. By using a hinge of this type, a stock pattern could be kept, and each article did not require to be fitted separately, as in the oval teapot already described.

Addition of Members (*continued*)

When the workman had made and fitted all the parts or members of his article, it was his next duty to solder them in position.

He commenced with the seat, which was first set in its place, and tied with iron wire to the body of the teapot. To assist the running of the solder he then spread some resin, or muriatic acid, inside the body, right round the line of its union with the seat, and then laid soft solder on the join. The pot was then carefully heated, and immediately the solder was seen to have sufficiently run, it was withdrawn.

The bottom was next fixed in the same way, the opening in the seat affording a means of placing the solder inside the pot. The spout, socket-shields, and sockets were next attached, soft solder being again used, while the workman held each mount in position with a clamp or piece of cork. The common cork was largely used for pressing on the mounts, especially when the solder had begun to run; a slight or gentle pressing then securely fixed a mount *exactly* where it was required.

Round both top and bottom of the pot it was usual to add

some form of decoration; to finish a teapot of the description given above, a decoration of beadwork was added, not more than $\frac{1}{8}$ inch in diameter. This beadwork was usually a hollow strip struck from a die and joined at the exact length with silver solder. An almost imperceptible layer of soft solder was placed inside it, and it was fitted in its desired position on the pot, the solder causing it to fit more accurately. The mount was then carefully heated and pressed to the pot with clamps or pieces of cork until the solder had set. It would be found, on removal of the clamps, that practically no trace of the solder remained, the usual layer of whiting having prevented its adherence on the outside. (In case a slight quantity of solder had exuded and discoloured the outer surface it was carefully removed with a little fine powdered brickdust rubbed on at the end of a stick, and washed off again with clear water.)

A decoration in similar style was set, as already mentioned, upon the seat of the teapot, placed quite flat. When the lid was closed, owing to its being slightly larger than the mouth of the seat, it must lie over on the metal: this gave the whole a somewhat unsightly appearance, and the copper edge of the lid would be distinctly observable. To obviate this the beadwork decoration was again brought into use, and placed round the edge of the lid upon the seat. This not only entirely covered the base-metal, but gave the lid a kind of socket or seat in which to rest.

The handle and knob were next added; these were, as a general rule, made of boxwood, or any similar hard wood, and often stained black; they may also be found in ivory, either in the natural colour or stained green.

The teapot was now finished save for the inside, which, should the copper-plate not have been double-plated in the first instance, must show the bare base-metal. It would be unsafe to leave it in this condition as the copper would soon corrode unless kept continually and perfectly clean, no easy matter when it was almost impossible to get at some places inside the pot. To prevent corrosion of the copper, the unplated parts were therefore tinned. (See Chapter VI.)

The work might now be considered complete, and so skilfully had it been done that it left the craftsman's hands in practically a

finished state. To put a final touch to it, it was slightly polished by hand with rouge, then thoroughly washed out with hot water to remove any impurities, and finally wiped over with a linen cloth preferably made from fine old linen sheeting. The article was not passed on to the burnisher as in the case of much Second Period work; the bright "mirror-like" appearance obtained by this method is not usual either on the solid silverware of the day, or on its substitute; this is perfectly easy to realize as so artificial a polish, apart from its "flashy" appearance, does not show a design to best advantage.

The above detailed description will convey some idea of the methods employed in making up an "Old Sheffield" teapot, but it can be readily understood that two articles are rarely found in which an exactly similar method has been adhered to in every particular; in details slight variations must occur, with continual alterations in design, and improvements in construction. A skittle-shaped teapot, for instance, had no separate bottom, but was formed entirely from one piece of plate; to a teapot or coffee-pot of a deep globular shape a lid would be attached in a totally different manner—it might, for instance, be designed to overlap the neck. On many early pieces the spout has been struck from a die in two halves, especially when elaborate construction is involved. On articles of a globular shape a foot very often forms part of the design. Salvers, snuffer-trays, and similar articles were made from a flat sheet; the sides were raised either by hand or from a die or by swages, and the edge was turned or bent over, sometimes to the extent of $\frac{1}{4}$ inch at the back.

In fitting together a candlestick (quite a distinct branch of the trade), the parts of which had been struck from dies, the workman must first remove all "fash," and any unnecessary edge left after stamping. The base of the 'stick might be in one piece, or in four sections; if the latter, he neatly joined them together with hard solder. He then built up the 'stick, using hard or soft solder as required, and employing much the same methods as in the teapot. The pillar in some cases must be raised to form a tube, and joined by a seam. The tube was generally decorated, in which case the pattern was struck in the flat sheet by means of a die. The workman turned over the edge of the metal below as

much as possible at the joins to hide the base-metal in a thorough manner; when this could not be done successfully, decorated bands were added. The nozzles were made in the same way, the edge being turned completely over.

Having thus built up his 'stick, in order to strengthen the hollow construction, the workman placed down the inside of the pillar or tube an iron rod of considerable thickness; and while this was secured in the centre, he filled up the inside of the pillar with pitch, run in while molten and allowed to cool.

In early specimens of candlesticks the inside of the base was fitted with a piece of fine wood, usually mahogany, though a piece of sheet tin was sometimes used for the same purpose. The bottom of the base was then covered with green baize. Occasionally during the First Period the base was made of copper-plate, finished in the same manner as the outside of the 'stick.

CHAPTER VI

TINNING

IT is a remarkable fact that although from very early times the English tin mines were world-famous, yet the art of tin-plating remained unknown in England until the Seventeenth Century. Phoenicians and Romans sent their ships to Cornwall, and traded with the Britons for their tin; and the latter nation understood thoroughly the process of tin-plating, and used it for covering their copper vessels. The word "stannum" used by Pliny has a disputed meaning; it may not have meant pure tin; some authorities maintain it to have been lead; it was more probably a mixture of both. Still the Romans at least recognized the injurious nature of copper vessels if used for food, and covered their copper, as in later days the inside of Sheffield Plated articles was covered.

No early tin-plated wares of British manufacture are to be found, and the earliest allusion (since the Roman days), to any method of tin-plating is to be found in Saxony, where, in the seventeenth century, as is recorded, it was introduced from Bohemia by a Lutheran clergyman. To Saxony, in 1670, Andrew Yarrenton was sent by an English Company of Merchants to ascertain the Saxon methods of tinning, and to bring back workmen. The enterprising Company appears to have been forestalled in the introduction of tin-plating by a certain William Chamberlayne, who in 1671 patented a process (probably obtained from Yarrenton), for tinning and plating brass and copper. The title of Chamberlayne's Patent is quaint reading; after the customary greeting from the King it runs: "A NEWE ARTE, MYSTERIE, AND INVENÇON OF GREAT USE AND BENEFIT TO THIS WHOLE NATION AND OUR OTHER COUNTRYES, NEVER BEFORE PUBLICLY USED OR PRACTISED WITHIN THESE OUR KINGDOMES OF ENGLAND, SCOTLAND AND IRELAND, OR ANY OUR DOMINIONS, TERRITORYES OR COUNTRYES, FOR PLATING,

AND TINNING OF IRON, COPPER, STEELE AND BRASSE, AS ALSO FOR THE COMPRESSING AND PLATEING OF ALL OTHER METALLS." It appears that this Patent was granted to Chamberlayne as a reward for his sufferings in the Royalist cause: "by reason of the long imprisonment of the said William Chamberlayne, as well in the time of the late intestine war as since, and other unavoydable interrupçons and obstruçon." It is impossible to say with any certainty if Chamberlayne's method was entirely his own, or if he made use of Yarrenton's recently acquired Saxon knowledge; no specification is enrolled with the Patent, but the introduction of tin-plating into this country took place about this time, and since then the craft has flourished in England and in Wales.

Many processes for tin-plating have been patented since Chamberlayne's; in his own day, 1691, Edmund Hemming patented an invention entitled "Making of Iron Plates tynned over, comonly called Tynned Plates, as good as those brought from and made in Germany." The last phrase has a very modern ring, and suggests that even in those days the British workman had to contend with German rivals!

It does not appear that the injurious nature of copper vessels (used for holding food) was recognized in Northern Europe until the Eighteenth Century: in 1754 tinned iron vessels were ordered for the Swedish fleets and armies in place of copper, and in 1755, attention was called to the necessity for tinning copper and brass vessels by the Society for the Encouragement of Arts, Manufactures and Commerce. In Brussels, in 1780, tinning with pure block tin from England was recommended by the Abbé Marci. It is highly probable that in England prominent attention was called to the necessity of tinning copper by the introduction of Sheffield Plate, when it became evident that the copper insides of all the new plated hollow-ware must be covered. It has already been stated that the tinning of copper articles, and chiefly those intended for domestic use, was absolutely necessary; as is well known, copper, when exposed to the air, is liable to corrode, and any dirt allowed to accumulate becomes highly injurious. In the case of Sheffield Plate it was therefore important that the inside or under surface of teapots, coffee-pots, hot-water jugs, tea-urns, cruets, salvers, wine-coolers, etc., should be properly tinned, supposing

that the original copper-plate had not been double-plated. Double-plating was naturally not used where not actually required, because of the additional cost; in some cases, moreover, the tinned inner-lining was preferred, as the coating of tin covered all impurities, and greatly helped to cleanse the article thoroughly, since it is a matter of surprise to learn how easily tinned articles can be kept clean.

Several methods of tinning the insides of copper vessels were patented in England from about the year 1760. John Bootie took out a Patent in 1768, "For tinning such copper and brasse vessels (that is to say) ship kettles and kitchen furniture, after my new invention." Maurice Crawford patented a process in 1770 for coating copper with tin, and in 1783, John Tylor invented a method specially applicable to Sheffield Plated wares. His specification is "For tinning or lining tea and coffee-urns and other copper vessels, whereby they are not liable to corrode, and are rendered elegant, compleat and useful." Tylor's method consisted of making a separate lining to the urn, "which new-invented inside or lining is made and prepared of copper, or any other metal or composition, to fit the outward case or body of the tea or coffee-urn. It [the lining] is then tinned and planished or plated with any other metal or composition on the inside thereof; or the said lining is made of copper, or of some metal or composition which has been already plated or covered with silver. The lining thus prepared is then introduced into the outward case or body of the tea or coffee-urn, and fixed or soldered therein; after this the cock and other fittings are fixed and soldered into the urn." It is especially stated that the "new-invented inside or lining, after the same is tinned and planished bright or plated as aforesaid, does not (like the common method of tinning tea and coffee-urns), require to be heated in the fire, so as to injure such lining, planishing, or plating as aforesaid."

Another method of tinning insides of copper or copper-plated vessels was that of John Poulain, patented in 1785; he calls his process "A new composition of tinning and lining of all utensils or vessels made of copper, brass, iron, or other metals, especially those used for kitchen or culinary purposes"; the composition was made by fusing together certain proportions of tin, malleable iron,

“platina,” silver, gold, borax, and powdered glass; the whole was fused together in a crucible, and cast into ingots. To enable the composition to be fit for use, it was heated and pounded in a hot mortar; an ingot of it was then made by heating it, “in a mould made of iron plate,” over the fire, well stirring it, and allowing it to cool. The same operation must be repeated for every coat of the composition that was applied. Two coats were quite sufficient for culinary vessels or utensils, and a thin coat of grain tin might be applied over the last coat of the composition to smooth it. To apply the composition: after being tinned in the ordinary way, the utensil or vessel had a coat of the composition applied with “sal armoniack”; when the composition was well spread, it was allowed to cool. The vessel was then annealed by being plunged into cold water while red-hot; the rough particles of the composition were scraped off, and the vessel scoured with sand.

It cannot be denied that these methods of covering copper linings, though doubtless efficacious, were somewhat elaborate, and hardly likely to be in general use. The ordinary method of tinning Sheffield Plated hollow-ware was a more simple one, but apparently it answered every purpose. The surface, as far as possible, was made bright by being thoroughly scraped and then washed over with a solution of sal ammoniac. The article was then heated to a mild temperature, and molten tin of a certain quality, or some metallic mixture designed for tinning, was poured into it, allowed to run quickly over the inner surface, and immediately poured out again. It was found that sufficient tin adhered to cover thoroughly and entirely the inside of the vessel. The backs of salvers, trays, and similar articles were tinned in the same way, the molten tin or mixture being made to flow quickly over the surface, and wiped off, when a sufficient quantity was found to adhere; this might be done while the article was in course of construction. In case the tin should become calcined, and to prevent the scaling of the copper, it was often considered desirable to spread a little pitch or rosin over the copper before applying the tin.

Note.—Gilding. See Chapter XVII.

CHAPTER VII

DIES, STAMPING AND SWAGING

Dies

EARLY in the manufacture of Sheffield Plate Dies were brought into use. It has been said that when dies are introduced into the making of an article "Art flies out of the window." It is to be regretted that with many manufacturers in modern days there is a good deal of truth in this assertion; but it cannot be supported in the case of the early dies that were used in the manufacture of Sheffield Plate.

These dies were made not only for the sake of saving labour, but because they were necessary for the accurate and proper construction of many pieces of plate. In making candlesticks—an important branch of the trade in those days—it was found impossible to place together accurately the many parts that made up the 'stick, especially when a fashionable design demanded a vast amount of minute detail. It would have been hopeless to attempt this by hand, as the working of the metal must reduce the thickness of the silver and possibly lay bare the copper. Silver candlesticks were always cast until early in George III's reign, and the waste entailed by such a method was enormous. A set of four 10-inch "cast" 'sticks usually weigh not less than 80 oz.; when dies came into use their weight was reduced to less than half that amount, while their strength was absolutely maintained. Whether the silversmith copied the Sheffield Plater (in the making of dies) is not quite certain, but it is very probable; that the change in the construction of silver commenced about this time there is no doubt.

For some patterns of candlestick as many as twelve parts were required, all struck out of dies; and the great art lay in the actual making of these dies. For the base of a candlestick

(usually the largest and heaviest part), a block would be used of cast iron, faced with steel, the whole measuring the size of the stamping, with a margin of $\frac{1}{2}$ inch to an inch, and weighing as much as $\frac{1}{2}$ cwt. Cast iron was used for the base of such a die for purposes of economy, as it cost far less than steel, and it proved a perfectly sound and satisfactory foundation during the stamping. It was covered with solid steel to the depth of the pattern required; from the centre of this was cut in intaglio the design chosen, extending in some instances to a depth of several inches. Imagine the skill, the patience, the care required lest a slight error were made, in most cases impossible to rectify.

A maker of dies was called a "Die-sinker," and die-sinking became a separate branch of the trade. The cost of a complete set of candlestick dies might reach from £20 to £50 (sums which to-day represent double the amounts). Among modern manufacturers these dies are commanding attention, and many, which for over a century have lain dormant, are again being brought into use, while the successors of original firms are reaping a rich harvest from the long-hidden stores of their predecessors. These well-preserved dies are now being used not only in the making-up of sterling silver articles, and in electro-plating on German silver, but also for electro-plating on copper. Articles made by the latter process have been frequently bought and sold as "genuine Sheffield Plate." It is well to remember when buying plate that "all plated copper is NOT Old Sheff.!"

Modern die-sinking can in no way be compared with the old method; too often a die is made for the main portion of an article, while the less important parts are filled up with makeshifts either from a stock pattern or from something similar procured from an outside stamp-shop. Few modern makers will take the trouble to make a complete set of dies for any article; some part is used not belonging to the set, whereby to a connoisseur the entire effect is spoiled.

Dies, especially during the earliest period of Sheffield Plate, were largely used for candlesticks; for most other articles—teapots, coffee-pots, hot-water jugs, etc.—the old process of raising by hand was always employed, except for small members and mounts, such as the sockets of handles, the "Lion" masks on tea

urns, and in all cases where the detail was too minute for hand-work.

In much of the earliest die-work, especially that used on candlesticks, and the members and mounts of coffee and hot-water jugs, and similar articles of the period, the die did not entirely finish the minute decoration; evidently the craftsman had not mastered the art of raising with sufficient success to raise the acute and highly decorated parts. Much of the work, therefore, which had so far been raised by dies, was touched up by hand with chasing tools. The principal parts made in this manner were the "Gadroon" edges on lids, bases, spouts, etc., of coffee-pots, the nozzles and bases of candlesticks, etc. That these parts have been touched up by hand is easily detected by the irregularity of the fluting; observe the work, where it would repeat itself out of the die, and watch the variation in the minute curves and flutings.

Later, however, the entire decoration was done with the die, and the makers learnt to raise the whole work. These very early pieces are of great interest, and have not always received from many students of "Old Sheffield" the attention they deserve.

Stamping

When the die was cut and finished it was taken to the Stamp-shop, which, needless to say, was on "terra firma," with a proper foundation also for the exceedingly heavy work. In a stamp-shop were usually kept several sizes of stamp for large and small work. The stamp proper consisted of two vertical iron pillars, at the top of which was fixed a pulley. At the foot was first placed a "drafting die"; this was set dead level, and held securely in position by large screws in its corners and sides.

In a groove between the two vertical pillars was fixed a sliding hammer, called the "Drop-hammer," on whose surface was a series of square holes or grooves, and which was worked with a strap over the pulley at the top of the stamp. About a foot or so up from the bottom of the pillars was placed a check on which the hammer rested when not in use. Immediately the hammer was raised in the groove the check fell back automatically, and remained back until replaced in position when required. A stirrup

was attached to the strap, so that the workman could assist the working of the hammer with his foot, leaving his hands to a certain extent free.

Round the edge of the die there was next placed a circle of stamper's clay to the depth of about an inch; this formed a kind of bank round the aperture in the die, and created a deeper hole in it. Into this was now run molten lead to the height of the clay, and, while the metal was still hot, the drop-hammer was raised and allowed to fall several times on to the lead and clay. These blows drove the lead into the grooves or holes in the drop-hammer, and becoming attached to the hammer, the lead rose with it, and formed a "force" or leaden face, the exact shape of the die, fixed to the hammer's front. The clay, though quite soft, prevented the lead running over the surface of the die, but did not in any way interfere with the fall of the hammer.

Assuming that the bottom part of a candlestick was required, and this to be stamped out of one piece (some bases being in four sections), if the stamping were to be $2\frac{1}{2}$ inches deep, the drafting die would not be more than half that depth, or its depth would be lessened by filling it three-quarters full of sand. The pattern cut out in the drafting die, to which the hammer had been made to fit, must have neither acute angles nor corners. A sheet of copper-plate of the correct size, called the "Work," was next placed between two sheets of copper, called the "Coppers," or "Protective Plates"; the latter were necessary because the friction caused by stamping must remove much of the silver if the bare plate were exposed; the coppers were therefore used as a protection.

Both the copper-plate, or work, and the coppers were next heated to a dull red; the hammer was raised and allowed to drop three or four successive times, the stamper increasing its height at each blow, causing the hammer to drop deeper into the die at every fall. This process is known in the trade as "Drafting." The first drafting would indent the work and form it into a shallow vessel; the plate must then be removed to be re-heated or annealed, after which either a deeper drafting die was placed in the stamp, or some of the sand was removed to make a more deeply-cut pattern in the die, and in place of the leaden force one of lead and tin was fixed to make a harder face to the hammer.

The drafting process was then repeated, forming the plate into a deeper vessel, when it was again removed and annealed, and further drafted as appeared necessary.

When the plate or work had been formed into a vessel of about the required depth, the perfect die itself was placed in the stamp. The lead and tin stamp was removed, and in its stead was fixed one of copper made from a solid block of metal. This was roughly cut to the shape of the force just removed, but slightly larger, and it was made red-hot. It was driven into the die by means of the drop-hammer, so that an exact impression of the die in every detail was obtained. A final copper force of this description was only used when the detail was very minute, and needed to be "fetched up" to appear crisp and sharp. The more minute the detail, the harder a force was required; steel was even occasionally employed. In cases where the detail was not so fine, a force of lead and tin covered with an exact impression of the die in copper was found sufficient, and it might even be possible to finish the work with the lead and tin force only.

A piece of copper, on which had already been struck an exact impression of the die, was next fitted in the die; this piece was called an "Outside Copper," and was used to protect the work during its coming stamping. The stamper now re-heated the work and its two protective coppers, and put them into the die, where they received several more blows from the hammer. The outside copper was then removed, and two or more blows given; lastly, the protective coppers were taken away, and the bare plate, which by this time had practically assumed the shape or design required, was fitted into the die, and one or two final blows were given (according to the discretion of the stamper), which impressed in relief on the plate the exact impression cut in intaglio on the die.

To stamp one piece of copper-plate as many possibly as forty strokes might be required; a manufacturer would naturally not strike one piece only out of a die; he would wait until he had sufficient orders to justify the expense of placing the die in the stamp, and would then proceed to stamp one, twelve, or even twenty-four dozen pieces from the same die. The stamping would also be carried out in a series of first, second, third or more

draftings, and by methodical working the stamp could in this way be kept continually in use.

The great secret of successful stamping was to allow the work to be gradually raised to the design and depth required, and to do this so that the metal was evenly stretched, no part of it remaining thicker than another. It must be very gradually done, for if by any error in judgement the draft was too big a stretch, the work would immediately be spoiled, either by the splitting or thinning of the whole work, or by the appearance of "Alexander."

Stamping called for the exercise of considerable skill and judgement, and was moreover very heavy work. In the larger stamps so heavy was the hammer that the strength of two men or more was required to lift it. Mechanical power was soon devised for working such a stamp, and in place of the pulley was fixed a revolving shaft, which, on the touching of a lever, raised the stamp as required, in much the same way as is done by the modern steam-hammer. When stamping shallow designs the drafting could be reduced to as few as two blows; in some cases even one might be sufficient. The wire edges and mounts, or bead-work decoration put on in strips on various articles, were struck in this way from dies, called "Strip Dies," in successive lengths. The final force in minute work, such as gadroon edges, was usually made of steel. Round and squat ball feet were stamped in two halves, and joined up the middle.

Swaging

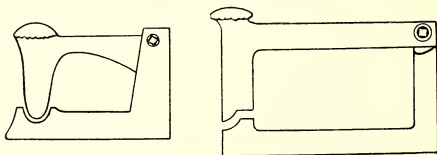
The Swage is a tool, which although much used in the making of Sheffield Plate, is not at the present day employed to any great extent. This is a matter for regret, since the firms who still make use of the swage do so with undoubted success. It is scarcely possible to discover what craft it was whose members invented the swage; it was used by tinsmiths and coppersmiths as well as by the silversmith.

The special purpose of the swage is to raise bands on hollow-ware—teapots, sugar basins, and cream ewers in particular—and to raise the edges or sides of salvers and trays, dish covers, etc., and also for putting the tiny edge on more minute work. By

the use of a swage it was possible to raise these more quickly and more accurately.

The swage itself consisted of two steel hammers (an upper and a lower), from one to two feet long, whose faces were cut or shaped to the design required, the one convex, the other concave, and each fitting perfectly on to the other. These two hammers were hinged in much the same way as a pair of fire tongs; the jaw was made to open to admit the work to the correct distance, the swage then closed, holding the work interposed between the faces of the hammers.

The workman must first carefully mark the position of the hollow moulding, as on a teapot or similar vessel; he then began to tap the top of the swage with a hammer, at each stroke moving



TYPES OF SWAGES.

the work slightly round until he had completed a circle. He continued this process, circle after circle, until he had raised a hollow band of the shape or design cut in the swage. The sides or edges of salvers were made in the same way, and, in order to lighten the blows of the workman's hammer, and to prevent injury to the plated metal, the faces of the swage-hammers were covered with tin, at least for the commencement of the hammering.

A manufacturer, as a rule, kept in stock a large number of swages for large and small work, and of many designs. The swage-faces were not successfully transmitted from one to another; there does not appear to have been any satisfactory method for fixing them accurately, although the cost of the swage would thereby have been greatly lessened; but the continued hammering, no matter how carefully they had been fixed, tended to loosen the faces, with the result that the work must get out of gear. The

expense of making a pair of swage-hammers therefore remained considerable, though it often proved possible to alter their design according to the demands of fashion. Swages came into most prominent use for raising bands on hollow-ware towards the end of the Eighteenth Century. These bands were seldom left perfectly plain, but were often decorated with flat chasing. On salvers and trays the swage was of use in raising the sides, *i.e.*, that part of the tray or salver itself which rises from the flat surface, forming a step between the decorated edge and the bottom of the salver. This swaged part was often left plain, or it was grooved into a line or series of parallel lines, so arranged as to be most effective according to the general design and the ideas of the craftsman.

It is not difficult to realize that it was a far easier process to raise minute bands in the manner described above than by using the raising mallet; the work was also done to better purpose, as the amount of strokes was greatly lessened, and the durability of the article increased, since no matter how carefully a hammerman used his mallet or hammer, the tendency to lay bare the base-metal was unavoidable.

CHAPTER VIII

CHASING AND PIERCING

IT is interesting to detect how Chasing shows the state of a country. There are at least three distinct periods when chasing was in vogue in England, and these may be traced with very little trouble, since the vogue for chasing seems always to be indicative of an outburst of happiness and good cheer throughout the nation. For instance, during the Commonwealth all metal-work was severely plain, as if even in this detail the mirth of the people must be repressed; but immediately the opportunity arose, during the reign of the "Merry Monarch," when trade was good in England, and liberty of thought prevailed, enjoyment and merriment burst forth again, and were typified in the decoration of the formerly severe pieces of plate; hence one might almost say that nothing escaped the overwhelming outburst of mirth!

It is not necessary to discuss in detail the quality of chased work of this period, except that it may be said to display great masterliness of execution, despite a certain crudeness and some irregularities, which may yet be forgiven for the sake of the admitted charm of the whole work. The fashion for chasing seems to have died out again with the death of Charles II, and it continued to be suppressed during the reigns of the succeeding monarchs, until the middle of the Eighteenth Century.

During the last years of George II, and at the time of the Third George's accession, England was once again revelling in a period of prosperity; the middle classes were acquiring wealth, and the nation as before exemplified their mirth by decorating their metal-wares! The chased pieces of this period are finer both in execution and design, and perhaps free from the crudeness observed in those of the previous date. This "spurt" of chasing was suppressed early in the reign of George III, when, though articles

of domestic use continued to be highly decorated, a more refined and cultured style prevailed. The work, both in make and decoration, was more minute: in place of the bold chasing, classical designs were introduced under the influence of the Greek School, whose early exponents in England had been the Brothers Adam and Chippendale. While some chasing was used at this time for the making of festoons on hot-water jugs, coffee-pots, and similar vessels, it was not very popular, engraving, fluting, and piercing taking its place to a great extent.

The final outburst of chasing is all too easily detected during the earlier years of the Nineteenth Century, when a passion for lavish decoration prevailed, and florid designs were everywhere in demand: even the finest plain pieces of old silver were sent to the silversmith to be submitted to his terrible skill, and altered according to the depraved European taste of the day!

There are three distinct processes connected with chasing, which for convenience' sake may be narrowed down to the following heads: Chasing, Embossing, and Flat-Chasing.

Chasing

The first process, pure and simple, was very little used during the First Period of Sheffield Plate, but during the Second it was much in vogue. Many articles were decorated in this way: the centres of snuffer-trays, and most examples of hollow-ware: tea-sets, jugs, coffee-pots, etc. If the article to be decorated were a snuffer-tray, the workman first placed the tray on a bed of hot pitch, and allowed the latter to cool and set. He then traced the required design, and proceeded to indent it with chasing tools. The desired effect was produced by indenting curved lines in the shape of leaves and circles, throwing into relief the untouched plain parts: a matted groundwork was then made by punching tiny circles, throwing the whole design into still more active relief. All the work was put upon the front of the article, the back remaining untouched: thus a fairly flat and even surface was obtained, while it had the appearance of being much in *repoussé*.

To chase a teapot, or coffee-pot, the work was done in the same manner, except that the vessel was first filled with pitch, and

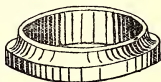
the design executed as described above. But as already stated, little of this form of decoration is found upon Sheffield Plate until early in the Nineteenth Century.

Embossing

Embossing is closely allied to chasing, the chief difference consisting in the fact that the article is "worked up" from the back as well as from the front. Articles decorated with embossing had not a flat surface as in the case of chasing, but the work was indented to its apparent depth. Embossing was a process used to a considerable extent during the earliest period of Sheffield Plate, on hollow-ware: for instance, on coffee-pots, two-handled cups, hot



SNARLING IRON.



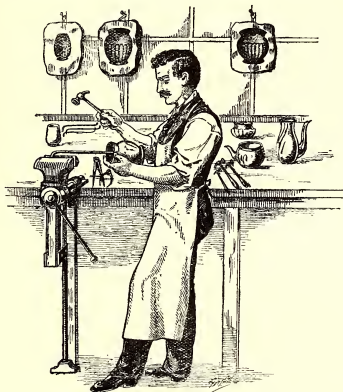
LEATHER RING.

water jugs, tea caddies, etc. (See Plates VI and IX.) To emboss an article, the workman began by outlining his design; then, having fixed his snarling-iron in a vice, he struck it on the end nearest the vice, so that the rebound raised upon the article the minute curves required. The snarling-iron was used in much the same way as the raising stake in raising, but it was made with a smaller face. By repeated strokes of the hammer upon the iron, flutes and curves were raised according to the intended design.

The article was next filled with pitch, and when this had hardened, the work was placed on a sand-cushion, or upon a leather ring; a rope or string held the work securely in position; it was passed over the work and through a hole at each side of the cushion. The ends were joined, and the workman set his foot through as in a stirrup, releasing the rope when he wished to move round his work. He indented inwards with a chasing tool each minute detail of the design, until the effect was completed.

The "matted" work was usually omitted during the First Period, so that the embossing stands forth in high relief.

The style of decoration carried out by embossing was generally fantastic flowers and leaves : sometimes combined with curves, the entire effect being always admirable. On certain articles, such as potato rings, which sometimes were entirely chased, any remaining groundwork was removed by being chipped or cut out.



SNARLING IRON IN USE.

Towards 1780 a great deal of decorative festoon work was put upon coffee-pots, hot-water jugs, and similar hollow-ware; this was chased, or embossed in the usual manner, with a difference merely in style of decoration.

Flat-Chasing

Flat-Chasing is a process almost entirely peculiar to Sheffield Plate, though it is found on pieces of very early silver. On a Charles II porringer and cover, recently under review, the decora-

tion has been carried out in this manner: it is also found to a considerable extent on silver of about the year 1760; in Mr. Letts' Collection two silver cups of Edinburgh manufacture, bearing the Hall Mark 1718-19, are similarly treated. Flat-chasing is used as a substitute for Bright-Engraving, and may be best described as actually "Chasing to imitate Engraving." The silver engraver cuts out his design—a crest or monogram, for example—with an engraving tool, taking out minute particles of silver from the surface of the article. The effect produced by flat-chasing is the same, but it was given by tiny shaped punches, which may be either curved, round, or any shape necessary for the design required. The work was held against a steel stake, and the design carried out by a series of indentations: these can sometimes be detected from the inside.

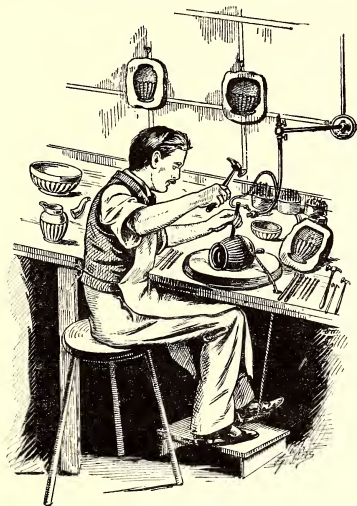
It was found more durable to decorate salvers in this way, and in the case of Sheffield Plate, bright-engraving was impossible as the engraver must cut through to the copper, or would at least risk doing so. The method of "denting in" was therefore attempted, and proved equally as successful as bright-engraving.

Flat-chasing was frequently used as a decoration combined with piercing. If the craftsman desired so to decorate a salt cellar, for example, he would first execute the pierced portion of the design: then, placing a steel stake inside the article, so that any pressure from the outside would be resisted, he would indent the pattern with a series of punches, using tools of different shapes, some with the design already cut in intaglio. It is not difficult, upon examination of a piece, to perceive where the design repeats itself, and that it is in many cases an exact facsimile. Examination under a glass reveals the fact that it is "indented," not "cut," however it may appear.

Salt cellars, muffineers, and mustard pots were often decorated with flat-chasing, combined with piercing; teapots, sugar basins and cream pails, tea urns, wine slides, tea caddies, were often flat-chased; but salvers are not generally found decorated by this process during the First Period of Sheffield Plate.

Fluting

Fluting is a form of decoration somewhat allied to chasing, and executed by a method almost identical with embossing. The raising-stake or snarling-iron used was securely fixed in a vice,



FLUTING.
(Sand-cushion in use.)

and the inside of the vessel to be fluted was placed against its face. The workman then produced a series of flutes by striking his stake or iron on the end nearest the vice, causing a rebound which marked or indented the vessel. The flutes were either spiral in shape, or straight, and extended to different lengths.

When the work inside the vessel was finished it was filled with hot pitch and placed on a sand-cushion, while the workman proceeded as in embossing to indent the pattern with tools similar to those used for chasing, producing more perfect and regular flutes, and obtaining altogether the effect of *repoussé* work. (See Illustration.)

Fluting is found on very early examples of Sheffield Plate, the flat-fluted pattern being then in most general use. Towards the end of the Eighteenth Century full-fluting became very popular, and a design of full and flat flutes intermingled is also seen. A familiar design is that formed into the shape of a bat's wing. The craftsman could form hollow flutes by the same process, or hollow and full flutes alternately, or any desired combination of both. In flat-fluting the indentations are less apparent, and the surface of the article remains flat, instead of being rounded.

Piercing

As early as George II's reign Pierced-Work seems to have made its *début* in England, and the earliest specimens of both chased and pierced work probably came from Ireland. Herewith are shown sixteen potato rings from Colonel Claude Cane's Collection, exhibiting the types of piercing in vogue in Ireland. Potato rings were seldom or never made in Great Britain; but the appearance of pierced-work in England is almost contemporary with the discovery of Sheffield Plate, and it was soon used in its manufacture. Piercing is seen on cake-baskets, sugar baskets with glass linings, salts, muffineers, mustard-pots, coasters, or bottle-stands, and on the fine *épergnes* of the period.

The pierced decoration may have been added after an article was entirely made up, or it may have done in course of construction if more convenient to the craftsman. The design was outlined in the same way as if for chasing, and a hole was drilled at the right spot; should a series of holes work in better with the intended piercing, these would first be made. Then the saw-piercer (such was he called) would proceed to cut away with a tiny saw the unnecessary metal until he had fully cut out the design he required—in much the same way as in modern fretwork. It is for



PLATE I
IRISH POTATO RINGS

(To face p. 62.)

this reason that pierced silver is so expensive, especially considering its slight weight; but the cost accumulated by the amount of silver cut out of the piece. Pierced-work was very largely used on Sheffield Plate, and so greatly was it in demand, that some makers invented special cutting tools in order to cut out designs with one or more successive blows in a press machine. In conjunction with pierced-work flat-chasing and embossing were often introduced, and these successfully combined make a highly effective decoration.

CHAPTER IX

WIREWORK

IN the construction of many articles of Sheffield Plate, Wire was most successfully brought into use, and made up into the bodies of cake-baskets, salt-cellars, muffineers, mustard-pots, sugar baskets, cream pails, wine-slides, and similar vessels. As a general rule the principal part would be composed of wire, though a pierced work border might be introduced.

The shape of the wire might be round, octagonal, square, or even oval, with variations and combinations of these shapes.

The making of the precious metals into wire is a very ancient craft, probably introduced into Europe from the East. The earliest known method of making wire consisted of beating out narrow flat strips of metal, and rounding them to shape with a file. In some cases the flat metal was cut into threads (for cloth of gold and other woven tissues), a task usually allotted to women and girls. According to Beckman, until the Sixteenth Century wire of the extreme fineness necessary for weaving was not made in Europe generally, but in France and Italy only. In 1592 it was introduced into Germany by Frederick Hegelsheimer, or Held, who took out a patent for "preparing fine gold and silver wire such as could be used for spinning round silk and weaving." Held appears to have maintained a monopoly of the manufacture in his own city at least, as in 1608, and at other subsequent dates his patent was renewed. It is not stated if Held made *plated* wire; his "works in copper gilt with silver and gold" are referred to in the patent; no plated wire was made in England until after the discovery of Sheffield Plating, though gold and silver wire were certainly made at a comparatively early date.

The process of drawing wire through holes does not appear to have been known before the Fourteenth Century, when the term

"Wire Drawer" began to replace the older name of "Wire Smith." All wire was hand-made in England until 1565, and during the Sixteenth and succeeding Century the craft attained considerable importance. During the reign of James I, and acting upon his authority, the Company of "Gold and Silver Wyre Drawers" of the City of London made an attempt to bring foreign artisans into England, a proceeding immediately resented by the powerful Company of Goldsmiths, who successfully checked this alien invasion! One is tempted to regret the absence of a similar influence at the present day! The Gold and Silver Wyre Drawers received a Charter in 1693, giving to their "freemen of the art and mystery of drawing and flatting of gold and silver Wyre, and making and spinning of gold and silver thread and stuff within the City of London and thirty miles round, power to reform, control and punish abuses and to search for defective wares." It is not uninteresting here to note that this Company was the first to admit any Jew into their fellowship, and to pioneer religious liberty in the City of London.

The simplest method of making Sheffield Plated wire seems to have been by the cohesion of thin sheets of virgin silver to the already-drawn copper wire, the application being made by the aid of heat, and a burnisher in the same way as in French Plating. In 1768 George Whateley, a plater of Birmingham, patented a process for making plated wire, following up his attempt with a second in the same year. Whateley's specifications afford a very excellent description of the method of making wire for Sheffield Plate in vogue at the time; they are therefore fully quoted.

Plating and Drawing Wire

Whateley's Specification, No. 1.—"METHOD OF PLATING SILVER UPON METTAL WIRE, AND DRAWING THE SAME INTO WIRE OF VERY FINE SIZES, BOTH ROUND, FLAT, AND SQUARE, AND OF DRAWING THE SAME SO FINE AS TO MAKE THREAD, LACE, FRINGE, AND TINSEL, WHICH WILL BE AS USEFUL IN VARIOUS BRANCHES OF BUSINESS AND MANUFACTORIES AS REAL SILVER WIRE, THREAD,

LACE, FRINGE, AND TINSEL, AND A GREAT SAVING AND BENEFIT TO HIS MAJESTY'S SUBJECTS; AND ALSO MY NEW-INVENTED METHOD OF PLATING GOLD UPON SILVER WIRE, AND DRAWING THE SAME INTO WIRE OF THE FINEST SIZES, BOTH ROUND, FLAT, AND SQUARE, AND OF DRAWING THE SAME SO FINE AS TO MAKE THREAD, LACE, FRINGE, AND TINSEL, WHICH WILL BE AS USEFUL IN VARIOUS BRANCHES OF BUSINESS AND MANUFACTORIES AS REAL GOLD WIRE THREAD, LACE, FRINGE, AND TINSEL, AND BE A GREAT SAVING AND BENEFIT TO HIS SAID MAJESTY'S SUBJECTS.

"Take fine copper, or two parts of fine copper and one part of fine brass, melt it, and when it is melted put in it a lump of borax as big as a 'hasel' nut, and run such mettall into round or flat ingots; then file it, and form it so as to be drawn into round wire, and draw it through eight or ten holes of a draw-plate till the wire is about two or three inches in circumference, and about four or five inches in length; then Neal it, or make the wire hot, after which smooth the wire with a fine file. Then take the finest virgin silver, run it into a flat ingott, and roll it to the thinness of a sixpence or shilling. When the silver is so rolled, cut thereout so much as will nearly cover or clip round the mettall wire. Then, with a smooth-faced hammer, rub the rolled silver after it is cut out, till it is very smooth on the side intended to be put next the mettall wire, and scrape the same side of the rolled silver till it is smooth and even as possible; after which take a lump of borax, dip it in water, and rub it all round the mettall wire, and rub the side of the rolled silver, so rubbed and scraped as aforesaid, with a lump of borax dipped in water; then put that side of the rolled silver rubbed with borax and water round the mettall wire, and draw it through three or four holes of the draw-plate till the silver is nearly closed round the mettall wire, then bind it round with iron wire to keep it in its place, and put it into a clear coal fire, blow the fire with bellows, and keep the wire turning with a pair of 'tongues' till the rolled silver and the mettall wire cement and incorporate together. Take it out of the fire and lay it on the top or side of the fire, and let it cool gradually. When it is cool take off the iron wire, and boil the mettall wire so plated with silver in about two quarts of water, in which put half a pound of allum, and boil it about ten minutes; then draw the mettall wire, so plated

with silver, through four or five holes of the draw-plate till the silver is intirely closed round the mettal wire. Then neal such silver-plated wire, and let the same cool gradually by the fire, and draw the same through so many holes of the draw plate, dressed with beeswax, till the wire gets stiff and stubborn; and continue to neal and draw the said silver-plated wire in manner and form last mentioned, from time to time, so often as the said silver-plated wire requires it; taking care, when such silver-plated wire is drawn fine, to neal it in such a manner that no blaze of the fire can reach it; and when it is drawn to the fineness that it is wanted, then, in order to make such silver-plated wire flat, and so fine as to make thread, lace, fringe, and tinsel, take the said silver-plated wire at such a fineness as is thought right, and roll it between a pair of rolls, which will reduce such silver-plated wire into such a state as to spin upon silk and thread, and make thread, lace, fringe, and tinsel. And in order to make the said round silver-plated wire square, draw the said round plated silver wire through such a number of square holes of a draw-plate, dressed with beeswax, as shall be necessary, and neal it, and draw it from time to time in manner and form before mentioned, untill such silver-plated wire is drawn to such squares, sizes, and fineness as shall or may be wanted.

“ And I, the said George Whateley, do hereby further declare that the last of my said Inventions is done and performed in manner and form following (that is to say):

“ Take silver, melt it and run it into round or flat ingotts, then file it and form it so as to be drawn into round wire, and draw it through eight or ten holes of a draw-plate till the wire is about two or three inches in circumference, and about four or five inches in length, then neal it or make the wire hot; after which smooth the wire with a fine file. Then take the finest virgin gold, run it into a flat ingott, and roll it to the thinness of a sixpence or a shilling. When the gold is so rolled, cut thereout so much as will nearly cover or clip round the silver wire, then with a smooth-faced hammer rub the rolled gold after it is cut out till it is very smooth on the side intended to be put next the silver wire, and scrape the same side of the rolled gold till it is as smooth and even as possible; after which take a lump of borax, dip it in water,

and rub it all round the silver wire, and rub the side of the rolled gold, so rubbed and scraped as aforesaid, with a lump of borax dipped in water. Then put the side of the rolled gold rubbed with borax and water round the silver wire and draw it through three or four holes of the draw-plate till the rolled gold is nearly closed round the silver wire, then bind it round with iron wire to keep it in its place, and put it into a clear coal fire; blow the fire with bellows, and keep the wire turning with a pair of 'tongues' till the rolled gold and the silver wire cement and incorporate together. Take it out of the fire and lay it on the top or side of the fire, and let it cool gradually. When it is cool take off the iron wire, and boil the silver wire so plated with gold in about two quarts of water, in which put half a pound of alum, and boil it about ten minutes. Then draw the silver wire, so plated with gold, through four or five holes of the draw-plate till the gold is entirely closed round the silver wire; then Neal such gold-plated wire, and let the same cool gradually by the fire, and draw the same through so many holes of the draw-plate dressed with beeswax till the wire gets stiff and stubborn; and continue to Neal and draw the said gold-plated wire in manner and form last mentioned, from time to time, so often as the said gold-plated wire requires it, taking care when such gold-plated wire is drawn fine, to Neal it in such a manner that no blaze of the fire can reach it; and when it is drawn to the fineness that is wanted, then, in order to make such gold-plated wire flat, and so fine as to make thread, lace, fringe, and tinsel, take the said gold-plated wire at such a fineness as is thought right, and roll it between a pair of small rolls, which will reduce such gold-plated wire into such a state as to spin upon silk or thread, to make thread, lace, fringe, and tinsel. And in order to make the said round plated gold wire square draw the said round-plated gold wire through such a number of square holes of a draw-plate dressed with bees-wax, as shall be necessary, and Neal it from time to time in manner and form before mentioned, untill such gold-plated wire is drawn to such squares, sizes, and fineness as shall or may be wanted."

Specification of Whateley's Second Patent for Wire-Drawing.—

"NEW-INVENTED METHOD OF PLATING GOLD UPON SILVER-PLATED METAL WIRE, AND OF DRAWING SUCH WIRE, WHEN PLATED WITH GOLD, INTO WIRE OF VERY FINE SIZES, BOTH ROUND, FLAT, AND SQUARE, AND OF DRAWING THE SAME SO FINE AS TO MAKE THREAD, LACE, FRINGE, AND TINSEL, AND BE AS USEFUL IN VARIOUS BRANCHES OF BUSINESS AND MANUFACTORIES AS REAL GOLD WIRE THREAD, LACE, FRINGE, AND TINSEL, AND A GREAT SAVING AND BENEFIT TO HIS MAJESTY'S SUBJECTS.

"Take fine copper or two parts of fine copper, and one part of fine brass, melt it, and when it is melted, put in a lump of borax as big as a 'hasel' nut, and run such metal into round or flat ingots; then file it, and form it so as to be drawn into round wire, and draw it through eight or ten holes of a draw-plate till the wire is about two or three inches in circumference, and about four or five inches in length; then Neal it and make the wire hot, after which smooth the wire with a fine file; then take the finest virgin silver, run it into a flat ingot, and roll it to the thinness of a sixpence or a shilling. When the silver is rolled out, cut thereout so much as will nearly cover or clip round the mettal wire; then, with a smooth-faced hammer rub the rolled silver, after it is cut out, till it is very smooth on the side intended to be put next the metal wire, and scrape the same side of the rolled silver till it is as smooth and even as possible; after which take a lump of borax, dip it in water, and rub it all round the metal wire, and rub the side of the rolled silver so rubbed and scraped as aforesaid with a lump of borax dipped in water; then put that side of the rolled silver rubbed with borax and water round the metal wire, and draw it through three or four holes of the drawplate till the silver is nearly closed round the metal wire; then bind it round with iron wire to keep it in its place, and put it into a clear coal fire; blow the fire with bellows, and keep the wire turning with a pair of tongs till the rolled silver and metal wire cement and incorporate together; take it out of the fire, and lay it on the top or side of the fire, and let it cool gradually. When it is cool, take off the iron wire, and boil the mettal wire, so plated with silver, in about two quarts of water, in which put half a pound of allum, and boil it about ten minutes; then

draw the mettall wire, so plated with silver, through four or five holes of the draw-plate till the silver is entirely closed round the metal wire; then neal it, and file or smooth the rolled silver so plated upon such mettall wire, and rub such silverplated wire with a lump of borax and water; then take pure virgin gold, run it into a flat ingott, and roll it to the thinness of a sixpence or shilling. When the gold is so rolled, cut thereout so much as will nearly cover or clip round the said silver-plated wire; then, with a smooth-faced hammer, rubb the rolled gold, after it is cut out, till it is very smooth on the side intended to be put next the said silver-plated wire; and then scrape the same side of the rolled gold till it is as smooth and even as possible; after which take a lump of borax, dip it in water, and rub it on the side of the rolled gold so rubbed and scraped as aforesaid; then put that side of the rolled gold, rubbed with borax and water as aforesaid, round the said silver-plated wire, and draw it through three or four holes of the draw-plate till the gold is nearly closed round the silver-plated wire; then bind it round with iron wire to keep it in its place, and put it into a clear coal fire; blow the fire with bellows, and keep the wire turning with a pair of tongs, till the rolled gold and silver-plated wire cement and incorporate together; then take it out of the fire, and lay it on the top or side of the fire, and let it cool gradually. When it is cool, take off the iron wire, and boil the said silver-plated wire, so plated with gold as aforesaid, in about two quarts of water, in which put half a pound of allum, and boil it about ten minutes; then draw the said wire, so plated with gold as aforesaid, through four or five holes of the draw-plate till the gold is entirely closed round the silver-plated wire; then neal such gold-plated wire, and let the same cool gradually by the fire; and draw the same through so many holes of the draw-plate dressed with bees-wax, till it gets stiff and stubborn, and continue to neal and draw the said gold-plated wire in manner and form last mentioned from time to time so often as the said gold-plated wire requires it, taking care, when such gold-plated wire is drawn fine, to neal it in such a manner that no blaze of the fire can reach it; and when it is drawn to the fineness that is wanted, then, in order to make such gold-plated wire flat, and so fine as to make thread, lace, fringe, and tinsel, take the said gold-plated wire at such a

fineness as shall be thought right, and roll it between a pair of small rolls, which will reduce such gold-plated wire into such a state as to spin upon silk or thread, and make thread, lace, fringe, and tinsel. And in order to made the said round plated gold wire square, draw the said round gold plated wire through such a number of square holes of a draw-plate, dressed with bees-wax, as shall be necessary, and Neal it, and draw it from time to time, in manner and form before mentioned, until such gold plated wire is drawn to such squares, sizes and fineness as shall or may be wanted."

It will be noticed that the inventor's methods enable him not only to make wire for the construction of articles in Sheffield Plate, but to spin wire for making thread, lace, fringe, and tinsel. He was able to effect a great saving by making cheaper wire for the latter purpose. His methods of making gold-plated wire are of great interest: in the first patent he plates gold upon silver wire—in the second, upon silver-plated wire.

There was evidently not a great quantity of gold-plated Sheffield Plate made; specimens of it are exceedingly rare, though many more examples of gilt Sheffield Plate are to be found. It is not easy to say if any pieces were made in gold-plated wire-work; possibly the patent applied merely to the making of tinsel for trimmings, etc.; but that it could have been made is quite possible, and any specimen must possess a special interest. It must also not be confounded with *gilt* Sheffield Plate, which is treated under "Gilding" (Chapter XVII).

About the year 1785, the firm of Wilks and Mottram invented another process for making plated wire, which seems to have been first used by Mark Dixon. It was performed in this way: A round bar of copper was taken, an inch or so in diameter; near each end of it was cut a groove. A tube of virgin silver was then made, and joined by overlapping with the aid of a hot iron and a burnisher. This tube was then drawn over the copper bar so as to exclude all air, and the whole was reduced in thickness and formed into the shape required by means of a draw-plate. A process for making hollow wire was also employed; this consisted in cutting a strip of plated metal, and bending it over to form a section shaped like the letter U. This was placed in a draw-plate and

pulled through the different shaped holes until a perfectly rounded wire was obtained; the seam was seldom, if ever, soldered. Examine a piece of wirework made in this way—the open seam is readily detected.

In the making of wirework much depended upon whether the article was designed entirely of wire, or only partly. The best effect was undoubtedly produced when wire was used in conjunction with pierced work, or with the plain metal.

Each piece of wire must be cut to the necessary length, and it was usually run up from the foot, or base, of the article to the top, and arched round, the top of the arch being fixed to the mount or rim with silver solder. The ends of the wire were attached to the base—sometimes with silver solder, sometimes with lead, according to the construction of the piece. If the wires touched or interlaced in any way at one or more places they were sometimes joined with hard solder.

There is an endless diversity in patterns of wirework, though the usual pattern was a plain arch, somewhat like an ordinary hairpin. Another commonly seen is twisted and worked like a piece of wire-netting. The perfect construction of a fine specimen of wirework was the most difficult of any type of Sheffield Plate. Take as an example the basket shown as Plate LIV; this was probably made about 1790. It is difficult to state with certainty where the workman would commence the actual making of this piece. The top mount was in all probability made first; it was cut from a strip of metal and joined by a straight seam with silver solder, and bent or raised into shape.

Baskets entirely made of wire, while some of them are delightfully simple, appear to lack dignity; they have a somewhat “wiry” look; they lose the lustrous and silvery appearance, and do not display the skilful workmanship imparted by the introduction of plain or pierced metal.

Wirework did not enjoy a very long run of popularity, though it may cause surprise to learn what a large amount of specimens exist. Yet really fine examples, decorated as described above, are decidedly rare. From the date of Whateley's Patents until about 1800 was the period during which the greatest amount of wirework was put upon the market. An article very generally made at this

time was the sugar basket, which frequently had its cream pail, a size smaller, made from the same design. They were fitted with blue, ruby, or clear glass linings, and to the cream pail was attached a ladle, as the cream was ladled and not poured out. Such a pair, sugar and cream basins to match, and in fine condition, are an exceedingly desirable possession.

CHAPTER X

BUCKLES AND BUTTONS

AMONG the first articles attempted in Sheffield Plate was the Buckle; Bolsover himself experimented in it, and in the year following his discovery started a factory on Baker Hill, Sheffield, where for some time he made quantities of buckles and buttons. After his desertion of the manufacture other makers continued to produce them. With the buckle we may class "Buttons, and other Articles in the Toy way," since various processes for plating these were patented during the time that buckles remained in fashion. Shoe buckles were introduced into England in the reign of William III, and continued in vogue with alterations in style and size until about 1812. When the King went to St. Paul's in 1789 to return thanks after his severe illness it was observed that he wore no buckles; this was a great blow to the buckle trade, and thenceforward the fashion for shoe buckles appears gradually to have declined.

A flourishing trade in gilt and silvered buttons and buckles was carried on in Birmingham, which for many years was practically the chief seat of the manufacture. In Hutton's "History of Birmingham" it is stated that the "Toy trade made its appearance in that City as early as the reign of Charles II, in an endless variety, attended with all their beauties and graces." With regard to the button, "This beautiful ornament," says Mr. Hutton, "appears with infinite variation; and though the original date is rather uncertain, yet we well remember the long coats of our grandfathers covered with half a gross of high tops, and the cloaks of our grandmothers ornamented with a horn button the size of a crown piece, a watch, or a John apple, curiously wrought, as having passed through the Birmingham press. Though," continues Mr. Hutton, "the common round button keeps on with the steady

pace of the day, yet we sometimes see the oval, the square, the pea, the concave, and the pyramid flash into existence. In some branches of traffic the wearer calls loudly for new fashions; but in this the fashions tread upon each other and crowd upon the wearer. The consumption of this article is astonishing: the value in 1781 was from threepence a gross to one hundred and forty guineas. In 1818 the art of gilding buttons was arrived at such a degree of refinement in Birmingham that three pennyworth of gold was made to cover a gross of buttons; these were sold at a price proportionately low. The experiment has been tried to produce *gilt* buttons *without any gold*; but it was found not to answer, the manufacturer losing more in the consumption than he saved in the material. There seem," says Mr. Hutton, "to be hidden treasures couched within this magic circle, known only to a few, who extract prodigious fortunes out of this useful toy, whilst a far greater number submit to a state of bankruptcy. Trade, like a restive horse, can rarely be managed; for, where one is carried to the end of a successful journey, many are thrown off by the way."

Among those fortunate riders of the horse of fortune was John Taylor, of Birmingham, "to whose uncommon genius," continues Mr. Hutton, "we owe the gilt button, the japanned and gilt snuff-box, with the numerous race of enamels. From the same fountain issued the painted snuff-box, at which one servant earned three pounds ten shillings per week by painting them at a farthing each. In his shops were weekly manufactured buttons to the amount of £800, exclusive of other valuable productions. One of the present nobility, of distinguished taste, purchased some of the articles, among others a toy of eighty guineas value; and while paying for them, observed with a smile, 'he plainly saw he could not reside in Birmingham for less than two hundred pounds a day.' Mr. Taylor died in 1775, at the age of sixty-four, after acquiring a fortune of £200,000."

The date of the introduction of the button into England is, as Mr. Hutton says, uncertain; yet buttons were evidently much worn as early as Charles II's reign, for there are many allusions to them in Pepys's Diary. Mr. Pepys (always delighted at an addition to his wardrobe!) mentions his "black camlett cloak with gold buttons and a silk suit"; and another "new colored silk suit

trimmed with gold buttons and gold broad lace round my hands, mighty and fine!" He also wears "a new shaggy gown with gold buttons and loop lace"; and alludes to a visit from his brother bringing him his "jackanapes coat with silver buttons."

Mr. Hutton also passes in review the history of the shoe-buckle in England. "Perhaps," he says, "the shoe, in one form or other, is nearly as ancient as the foot. It originally appeared under the name of sandal; this was no other than a sole without an upper-leather. That fashion has since been inverted, and we have sometimes seen an upper-leather nearly without a sole. But whatever was cut off the sole, it always demanded a fastening. Under the house of Plantagenet, the shoe shot horizontally from the foot, like a Dutch skate, to an enormous length; so that the extremity was fastened to the knee, sometimes with a silver chain, a silk lace, or even a packthread string, rather than avoid '*genteel taste*.' This thriving beak drew the attention of the legislature, which determined to prune the exorbitant shoot; for, in 1465, we find an Order of Council prohibiting the growth of the shoe beyond two inches under the penalty of a dreadful curse from the priest, and, what was worse, the payment of twenty shillings to the King. This fashion, like every other, gave way in time; and in its stead the rose began to bud upon the foot, which under the house of Tudor opened in great perfection. No shoe was fashionable without being fastened with a full-blown rose. Ribbons of every colour, except white, the emblem of the depressed house of York, were had in esteem; but the red, like the house of Lancaster, held the pre-eminence. Under the house of Stuart the rose withered, which gave rise to the shoe-string. The beaux of that age ornamented their lower tier with double laces of silk, tagged with silver, and the extremities were beautified with a small fringe of the same metal. The inferior class wore laces of plain silk, linen, or even a thong of leather, which last is yet to be met with in the humble plains of rural life. The revolution was remarkable for the introduction of William, of liberty, and the minute buckle, not differing much in size and shape from the horse bean. This offspring of fancy, like the clouds, is ever changing. The fashion of to-day is thrown into the casting pot to-morrow. The buckle seems to have undergone every figure, size, and shape of geo-

metrical invention. It has passed through every form in Euclid. The large square buckle, plated with silver, was the 'Ton' of 1781. The ladies also adopted the reigning taste; it was difficult to discover their beautiful little feet covered with an enormous shield of buckle, and we wondered to see the active motion under the heavy load. In 1812 the whole generation of fashions in the buckle line was extinct; a buckle was not to be found on a female foot nor upon any foot except that of old age."

In Birmingham the making of both buckles and buttons was regarded as a separate trade; the titles "Buckle Maker" and "Buckle-chape Maker," as well as "Button Maker," appear in the Directories of the day, and such special lines are noted as "Horn and Plated Button Makers," "Gilt and Plated Button Makers," "Silverer and Plated Buckle Maker," "Metal, Gilt and Plated Button Maker," etc. Buttons were very extensively made in Birmingham in the latter half of the eighteenth century; a Directory for 1770 suggests the following varieties: "Gilt, plated, silver, lacquer, and pinchbeck, the beautiful new ware 'Platina,' inlaid, glass, horn, ivory and pearl." At this time the large chased buckle, plated on an iron frame, cost from half-a-crown per pair; cast silvered buttons one shilling per pair only.

An amusing reference to the "overgrown" buckle is to be found in Boswell's "Life of Johnson"; visiting Birmingham in 1778, the Doctor must needs go to Wirgman's, the celebrated "Toy Shop," for a new pair of buckles. "But, Sir," said he, "I will not have the ridiculous large ones now in fashion, and I will give no more than a guinea for a pair." When, three years later, the rage for large buckles was at its height, must not the great Doctor's Birmingham purchase have appeared hopelessly behind the times!

In 1745, Matthew Boulton, afterwards the founder of the celebrated Soho factory, at the early age of seventeen invented a process for making inlaid steel buttons; this proved highly successful, and he applied it to the making of watch-chains, buckles, charms, and trinkets. For many years these wares were in great demand, and vast quantities were exported to France, where they were bought with delight by the English "beaux" as the very latest French fashion!

In 1778 William Collins of Birmingham, button and toy maker, patented a process for making plated buttons, which, according to Hutton's "History of Birmingham," was considered an improvement on previous methods. Collins's specification sets forth his "Method of preparing, gilding, polishing, and burnishing a metal (or metals), plated with silver, for making buttons and other articles in the toy way, both for use and ornament, by laying on the gold when the metal, or metals plated, are in a state of more considerable thickness than when they have been before used for the purposes aforesaid."

His process consisted in "Rolling or extending the said metal or metals until they are brought to the proper or usual size and thickness for the said uses, and by passing such metal as is required bright thro' a pair of rollers of my own invention, one of which, moving slower than the other, gives the metal so roll'd a lustre superior to any heretofore produced by the common method of rolling in which both rollers move in an equal degree."

Seven years later, 1785, another patent was taken out by William Playfair, of Howland Street, in the parish of St. Pancras, London; his specification deals with "Certain new methods of making shoe, knee, stock, and other buckles, of silver or other metals, and of covering the surfaces of copper, or other metals, with silver, gold, or mixtures of silver or gold with other metals, which operation is commonly called plating."

Two methods of making the above-mentioned buckles are set forth in detail. The "Method of plating or of covering the surfaces of copper or other metals with different allays (alloys?) of gold or of silver consists in inserting a thin sheet or plate of the silver, so much allayed with copper that it will melt sooner than either of the two metals that are to be united by the operation." For instance, a piece of copper of a certain size is smoothed and flattened; a thin piece of silver of the same size, considerably allayed with copper, is likewise flattened and cleaned on both sides; a thicker piece of silver, containing less copper, is treated in a similar manner, one side only being cleaned; the copper has the thin silver plate laid upon it, and the thicker silver plate, with its clean side downwards, is placed on the top of the whole. The three pieces of metal, thus disposed, are then brought into contact

by means of a hammer and anvil, bound together and put into the furnace that is ordinarily used for plating with pure silver, "till the intermediate piece of silver appears to melt." The resulting plate is treated in the same way. To plate the copper on both sides, the above operation has to be done to both sides of the bar at the same time.

In the same year James Alston of Birmingham, Buckle and Button Maker, patented an invention for "lining, edging, plating, and covering, either in the whole or in part, with silver or gold or otherwise, buckles and other articles made of iron, copper or other metals or mixt tables, by the use and application of tin or alloyed tin."

The processes for accomplishing the above-mentioned objects are set forth in the specification under the following heads:

Process No. 1.—The chased blanks are first tinned all over very carefully; they are then plated either by "dipping," or "filling." If they are plated by "filling," the proper amount of tin is measured, so that by "proportioning the blanks, the silver, and the tin to each other," any selvage on the edges is avoided; the silver, it must be observed, is cut or pared "so close to the impression given to it by the captain as exactly to fit the blank it is to be plated upon."

Process No. 2.—The blanks are "French plated" (leaf silver burnished on whilst they are hot), then plated by "dipping" or "filling." "Hot silvering" may be used instead of "French plating," if the blanks are made of an alloy of copper.

Process No. 3.—The edges of buckles, as well as the tops, are plated with the same piece of rolled silver. In making the "swageing stock," the "captain" is pressed in its whole thickness into the sand, and the sand is raised "on the outside as high as the bridges." The "plating stock" cast upon this "swageing stock," "has a compleat rim all round its concave impression of the captain." The silver is cut "sufficiently large to cover over the edges and bridges of the buckle"; the top impression is swaged upon the captain, and squeezed between the two stocks. The silvers are then soldered on to the blanks, either by dipping or filling as before described.

Process No. 4.—The silver is impressed for the bottom and

edges only, by being swaged upon a buckle laid upon a "plating stock with an impression of the top only"; the said buckle, with the silver, being pressed into a "bottom stock," that has been cast upon the "plating stock," with the buckle (duly protected by clay) in it; the edges of the silver are then pared off, and the blank partially plated. The top silver (swaged, pared, and clayed) is then tinned over the inside by being drawn over melted tin, and plated on to the half plated blank by heating in a stove.

Process No. 5.—Plated buckles that are afterwards to be stamped, are "made of an equal thickness," by making the impression in the "plating stock," to run exactly parallel with the face of the "stock," and by freeing the bottoms of the blanks from lumps of metal. Fewer blows are required under the stamp, when a gentle blow is given at first with a stamp hammer. To plate the "bridges" of the buckle, a larger quantity of solder is allowed to surround the blank at suitable places, or the tin is forced up by pressure.

Process No. 6.—The blanks must be narrower and thinner than the original buckle, and have their bottoms clayed after being tinned. Both stocks being heated, the buckles are plated by "filling," the "bottom stock" being placed on as quickly as possible, and struck with some blows of a hammer. The success of this process is further insured by a recess made between the two stocks to receive the superfluity of tin, by using the proper measure of solder, and by casting a handle of stout iron wire in to the "bottom stock."

Process No. 7.—The buckle (clayed all over) and the silver intended to cover it, are laid between the two stocks; the bottom stock has an inlet for pouring in the solder, and a channel to receive the superfluity; the melted metal is then poured into the heated stocks, the "sprays" cut off, the silver (thus tinned) replaced in the plating stock, and the hot tinned blank placed upon the silver; by the help of glazier's solder and Venice turpentine the hot blank melts the solder, and becomes united in the silver. Another variation of this process consists in stamping the blanks "into the silver, without previously soldering them together."

Process No. 8.—Two methods of stamping the blanks are set forth in detail.

Process No. 9.—Certain methods of giving “the impressions to the silver plates before they are soldered to the buckle,” are herein described.

Process No. 10.—This process is applied to blanks, “intended to be afterwards plated on the tops,” as a preparation to any of the foregoing processes. Silver or other leaf metal is burnished on to the roughened and cleaned blanks by means of a steel burnisher. In some cases sufficient heat may be employed to enable the silver to unite with the nearly melted tin by slight pressure.

Process No. 11.—Buckles are covered with leaf metal by an intermediate coat of varnish. “Buckles plated on copper,” are covered at the edges and bottoms, either by means of an amalgam, by the use of corrosive sublimate, or by a hot soldering iron.

Process No. 12.—“Coat, breast, and vest buttons of sheet iron” are covered “with tin, silver, and gold, or otherwise,” as follows: The cleaned sheet iron is stamped red hot in a die, the selvage is cut off, and the shanks fixed on. The buttons are put into an iron barrel which revolves on an axis over an open fire; when they are sufficiently heated to melt tin, the tin or pewter is added, together with some sal ammoniac; the subsequent processes of burnishing and coating with metal are performed when the movement of the barrel backwards and forwards has enabled the buttons to become completely tinned. The tops of the buttons are inlaid with leaf metal by pressure into a recess, and subsequent burnishing. The bottoms of the buttons are covered with tinsel by the application of corrosive sublimate, heat, and solder to the said tinsel (properly cut out), and by applying the tinsel so heated and prepared to the heated buttons. Sheet tin, rolled steel, and tinned cast-iron are also mentioned as being available for making the above-mentioned buttons.

Yet another method of making plated buttons was that of Robert Hickman, patented in 1787. His method deals with “A new method of making and manufacturing gilt and plated coat and waistcoat buttons, by uniting or amalgamating with or by means of tin, or tin and lead mixed, gilt and plated metal button shells, both coloured, plain, and figured, with bottoms of copper, brass, iron, mixed and compound metals.” The sides of the bottoms

on which the shells are to be laid, are tinned by means of heat and sal ammoniac. When the shells are filled with tin, the heated bottoms are slid upon them, "by which means the bottoms and shells become united and amalgamated." The buttons are then inlaid with "gold, silver, or any other metal," by means of dies, or they may be otherwise ornamented.

After the introduction of covered buttons the manufacture of gilt and plated buttons somewhat declined, though these latter continue to be made to the present day for military and other uniforms.

CHAPTER XI

GENERAL NOTE ON THE FIRST PERIOD

FROM the point of view of a collector, the earliest pieces of domestic Sheffield Plate are by far the most interesting; and by "earliest" is meant those made from the beginning of the manufacture until about the year 1770. Specimens of this period are exceedingly rare, and difficult to find in good condition, and while it cannot be said that many of them are comparable in style with those made from 1770 to 1785, yet the design is so well executed that the undeniable faults in construction may be forgiven when one takes into consideration under what difficulties the early makers must have worked. An example will almost certainly lack that look of stability characteristic of the solid silver of the period; the idea suggested by the whole construction is that a tin-worker or coppersmith has suddenly attempted to work in silver, and cannot entirely free himself from the tricks of his former trade! Many articles of this date will to a casual observer appear as excellent in every way as their fellows in solid silver, yet a close examination reveals the fault already stated. For this very reason many buyers of "Old Sheffield," having anticipated a purchase from the first charming appearance of a piece, find that when examined it does not give entire pleasure and satisfaction. Yet true collectors have always bought this type of Sheffield Plate whenever a good specimen has "turned up."

It was not long before the construction of the new manufacture improved, and it continued to do so gradually and steadily. Without doubt it was towards those magic years of English Art, 1770 to 1780, that by far the finest specimens of Sheffield Plate were produced. The chief characteristic of pieces made during this period is their exquisite prettiness and simplicity; this very simplicity proving at once their ornament and their greatness.

The designs now in vogue were artistically perfect, combining strength and simplicity to an astonishing degree; much of the work was done under the influence of the prevailing cultured thought of the day, and a remarkably high standard of perfection was reached. Simple though a design might be, it was none the less difficult of construction, as the workman of to-day would readily agree.

The best specimens of this period are so delicately small, so tastefully moulded, so elegant in shape, that it seems possible to maintain that the craftsman at that time could make no piece that lacked perfection either in style or construction. This is but in accord with the high standard to which English Art had attained at this time; Reynolds was at the height of his fame and popularity, with Romney, greatly daring, almost the Master's rival! In the year 1770, Flaxman was only beginning his career, but the influence of the Classical School was distinctly felt in England, in practically every branch of Art. The silversmith adapted the finest designs of the classic period, and decorated them with such taste as the cultured buyers of the day demanded; these same designs were sought and used by the Sheffield plater, and even the fastidious Horace Walpole did not disdain the new invention! The allusion to it in his Letters has already been quoted in this volume. Within the famous "Club," under the Presidency of the great Samuel Johnson, were often gathered together representatives of the best that Britain of that day could boast in Art, in Literature, in Science; reading those names one need no longer wonder at the excellence of even an "imitation" ware made under such happy auspices, and additional support is given to the assertion that as refinement of thought penetrated into hitherto uncultured homes, the desire arose to perpetuate it even in articles of common use. The improvement in the tableware of the period has been dwelt on already in these pages, and the almost immediate success of Sheffield Plate when applied to tableware fully justified. The finest specimens of Bow and Chelsea china are traceable to these few wonderful years: "Scale Blue" Worcester, to-day almost priceless, was made and admired from 1768 onwards.

At this time also was produced the pierced-work always in demand with the present day collector of "Old Sheffield"; such

a piece is very light in design, almost fragile in appearance, yet built on lines which gave great strength. It is usually highly decorated, but invariably with exquisite taste. Fine specimens of wirework are also associated with this period. It is noteworthy that although the workman was using an imitation—not a purely precious—metal, he yet practised the greatest economy; not an ounce more metal being put into a piece than was actually required, not a fraction more weight being added than the design demanded.

And while the desire for beauty was expressed in every line of a piece, the craftsman of that day always kept steadily in view its utility; each article must be designed and constructed to suit its destined purpose, a principle sometimes neglected by the metal-worker of to-day. This is perhaps one reason for the permanent attraction which specimens of the plate of this period possess; they were made to be useful; ornamentation was added as an after-thought!

One point more with regard to their workmanship must not be overlooked; at that time an article seldom changed hands in the course of construction; the craftsman was proficient in each branch of his trade, and often made an entire article, raising, mounting, finishing, with equal skill. At the present day the work is more often completed in sections, since a workman is but rarely qualified in more than one branch of a trade, and seldom, if ever, carries a piece through from start to finish, even when thereby he might rejoice, as did the old-time craftsman, in the whole and perfect creation of his hands!

CHAPTER XII

ILLUSTRATIONS FROM ORIGINAL PIECES OF THE
FIRST PERIOD
(WITH DESCRIPTIVE NOTES)

PLATE II

Hot-Water Jug

Entirely constructed from copper-plate, and plated on one side only (being made before double-plating was known). Where double-plating appears necessary, as on the inside of the lid, two plates have been placed back to back. The decoration on the lip, lid, and handle-sockets is an example of early die-work, touched up by hand. The body has been raised (see "Raising," Chapter IV); the seam may be observed between the handle-sockets. The knob has been struck from a die in two halves, the seam being traceable. The hinge is an example of earliest "Book" make. For the purpose of economy the inside has been tinned; the handle is wickered.

The inside of the lip is plated, and here there is no evidence that two sheets of copper-plate have been placed back to back; it is, therefore, difficult to make a definite statement as to the method employed. In similar cases, such as the nozzles of candlesticks and other small members or parts where it was absolutely necessary for silver to appear on both sides, and yet impossible to place satisfactorily two pieces of plate back to back, it can only be presumed that one of the two sides was French Plated. Several pieces have been carefully tested: the result, though not wholly satisfactory, tended to show that while the one side (and that the side most exposed to wear), had only one coating of silver, the other had evidently a series of sheets applied by the French Plating process. It may also be stated that occasionally in similar instances silver has been applied in one sheet and made to adhere with the help of soft solder.

The plating on the body is so thick as to have stood the engraving of the coat of arms, and even now it has given way only slightly.

This jug is an excellent and rare example of the earliest work of the "Sheffield Plater."

Height, 10 inches. *Circa 1760.*

From Mr. Dighton's Collection.

(A similar jug, bearing the "Imitation Silver Marks," was recently in the possession of Messrs. Wilson and Sharp.)



PLATE III

Coffee Pot

Entirely made from copper-plate and plated on one side only. The body raised with a seam between the handle-sockets, a piece being let in at the foot, imperceptible save from the inside. The foot itself is early die-work touched up by hand; in its construction two pieces of copper-plate have been used in order that the foot may appear plated below: the upper edge is turned over. The lid is constructed in the same manner, but here no less than three separate pieces of copper-plate were necessary. The spout, handle-sockets, and knob are also die-work struck in two halves and silver-soldered together before being fixed in position.

The hinge is an example of early "Book" make: for greater security the ends are placed, the one inside the handle-socket, the other between the two plates of the lid.

The inside is tinned.

The handle is of wood stained black, but in this case is not the original: to prove the faulty construction an original handle for this type of pot is shown on Plate XVIII.

Height, 11 inches. *Circa* 1760.

The property of Mr. Leo Fisher.

The three small marks at the side of the handle-socket are the "Imitation Silver Marks" described in Chapter XXII.

A good, though not a rare, example of early work.

Such pieces are also found embossed with fantastic flowers and scrolls: see Plate VI.



PLATE IV

Group: Two Candlesticks

First (one of a set of four).—This 'stick is constructed from exceedingly early die-work, with its decoration afterwards touched up by hand. The base is struck in one piece.

The pillar exhibits one seam only, showing that this part has been raised, the fluting being probably applied before raising with the aid of a die, or possibly the whole may have been hand-fluted. The other members and the sockets have been made in a similar manner.

The nozzle is plated on one side only, but in order that the back may show a coating of silver, two sheets of copper-plate have been placed back to back, and the edge of the nozzle turned over concealing the bare edges. The nozzle socket is the only part of the 'stick which has been plated on both sides. (See descriptive note to Plate II.)

This candlestick was undoubtedly made before double-plating was known, and it was designed before nozzles were in universal use, though in this case the workmanship of the nozzle is quite contemporary with that of the 'stick. Here the drip from the candle can be caught in the well at the base. It was not until about the middle of the Eighteenth Century that nozzles were added to candlesticks, and on the earliest makes (as can be seen from their designs) the nozzle was an afterthought. The nozzles of many early silver 'sticks are unmarked, or bear the mark of a later date, to prove the innovation.

The workmanship of this entire candlestick shows the early Sheffield Plater's attempts at construction: a silver 'stick of this period would be cast in sections and soldered together; yet here the plater had to work up a sheet of plate with silver on one side only, at the same time carefully concealing the base-metal; a totally different method of construction was therefore necessary, while the workmanship became far more difficult.

The inside is loaded with pitch, and the base is finished with a piece of mahogany and green-baized.

Height, $11\frac{1}{2}$ inches. *Circa 1760.*

The property of Mr. Leo Fisher.

Second (one of a pair).—Of similar construction: the base from a die in one piece; the pillar made in sections partly from a die and partly raised, the seams being fairly apparent. The construction of the nozzle resembles that of the first 'stick. The inside is loaded; the edge of the base is turned over on to a zinc or tin foot, on which is finally placed a piece of green baize.

Height, $11\frac{1}{2}$ inches. *Circa 1760.*

Bears the early maker's mark: "H. J. and Co." See "Makers' Marks."

From the Author's Collection.

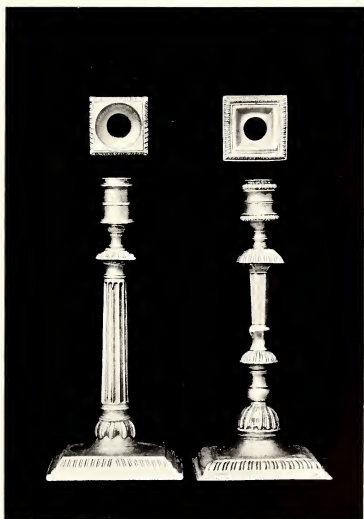


PLATE V

Cup and Cover

The body is raised with a seam which may be observed between the handle-sockets: a seam also on the box handle which is raised in like manner. The lid and foot raised without seams, possibly by the aid of dies: the knob is die-work.

Height, 11 inches. Extreme width, 10 inches. *Circa 1770.*

From the Collection of Viscountess Wolseley.



PLATE VI

Two-handled Cup

Raised body with seam and a piece let in at the bottom. The foot, handles, and handle-sockets are partly raised and partly die-work. The base is fitted with a piece of mahogany; the body decorated with embossing. An excellent and rare example of early embossed work. Similar pieces are occasionally found bearing the "Imitation Silver Marks." Coffee pots resembling the one shown on Plate III are to be found decorated in a similar manner. *Circa 1760.*

From the Collection of Viscountess Wolseley.



PLATE VII

Escallop Shell (one of a set of four)

Raised from a die, touched up by hand, in so shallow a piece no seam being necessary. The back is plated, but by what method is a matter of conjecture, since this Escallop was undoubtedly made before double-plating was practised. The edges on all four are quite bare, yet originally these must have been covered; it can only be presumed that this was done by French Plating. Probably, therefore, the backs (which are still in quite good condition) were plated in the same way: the removal of the feet tended to support this theory.

The feet are struck from dies.

Size, 6 by $4\frac{3}{4}$ inches. *Circa* 1760.

From the Author's Collection.

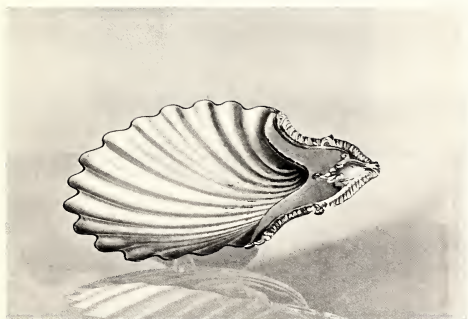


PLATE VIII

Sugar Caster

Raised body with seams: the top is slightly decorated with embossing. The foot is loaded and finished with a piece of copper-plate. Bears the "Imitation Silver Marks" (see "Makers' Marks").

Height, $11\frac{1}{2}$ inches.

Circa 1770.

From the Collection of Viscountess Wolseley.



PLATE IX

Tea Poy

Body, foot, and cover raised, seams being observable.

The foot, lower part of the body, and the cover are fluted, with both hollow and full fluting. The centre of the body is chased and embossed with fantastic flowers and scrolls.

This whole piece is a fine example of the work in vogue during the latter part of George II's, and the early part of George III's, reign. *Circa* 1760.

From the Collection of Viscountess Wolseley.



PLATE X

Stoneware Beer Mug, with Sheffield Plate Mount

Probably of Fulham ware. Capacity about half a gallon.

Circa 1760.

From Mr. Drane's Collection.

Such mugs are rarely found mounted in Sheffield Plate; more often they are unmounted or mounted in solid silver.



PLATE XI

Tankard and Cover

The lower part of the body is hand-fluted; the upper has a reeded swaged band; the domed lid is early die-work. The body itself is raised with seams; the box or hollow handle is also raised; the mountings and hinge-bearers are die-work.

The lip is not original, since this piece is evidently a tankard converted into a jug at a time when tankards went somewhat out of fashion.

Circa 1765.

From the Collection of Viscountess Wolseley.



PLATE XII

Candlestick

Base from a die in four sections; the bare edge is turned over to the extent of one-eighth of an inch. The pillar and capitals from a die in sections; the base metal edge of the capital is so cleverly covered that it requires careful examination to discover the seams. The nozzle is struck from a die and its edge turned over.

The inside is loaded with pitch, finished with a piece of wood, and covered with green baize.

The die-work is of the earliest form and touched up by hand.

Height, 12 inches. *Circa 1765.*

From the Collection of Mrs. Johnson-Brown.



PLATE XIII

Hot-Water Jug.

The body and neck are raised with seams in the usual position, and joined together at the top of the frieze. The festoons and frieze on the body are embossed; the masks are die-work, and applied to the body.

The beadwork round the lip is die-work, first constructed in a strip, then turned over so as to fit the edge. The lid is plated on both sides. (See Plate II.)

The knob is die-work; the "Book" hinge an advance on that seen on the coffee-pot (Plate III). Observe the silver caps on the ends of the pins. The foot is raised, its decoration being embossed; the ball-feet are struck in two halves and joined, the join being quite perceptible even in this illustration.

The handle has originally been wickered, silver being fired to the ends only (from motives of economy).

This charming and excellent jug shows the advance made in workmanship since the earliest attempts of the makers of Sheffield Plate; the die-work is improved and is possibly untouched after leaving the die, while the whole construction lacks the crudeness characteristic of pieces made ten years earlier. Height, 11 inches. *Circa* 1770.

The property of Mr. Dighton.

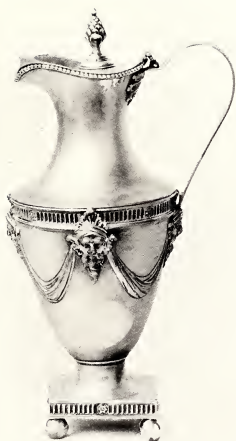


PLATE XIV

Hot-Water Jug

Raised body and neck; the foot from a die. The frieze, handle-sockets, and knob are also die-work.

The beadwork decoration on the mouth has first been struck from a die in a strip, then turned over to form a section shaped as a "U," in order to cover successfully the base metal.

Circa 1780.

From the Collection of Viscountess Wolseley.



PLATE XV

Group: Four Boxes

First. Snuff-box.—Constructed entirely of copper-plate plated on one side only. The sides are raised, a seam being observable. The top of the lid is of tortoiseshell inlaid not with silver, but actually with "Sheffield Plate"; the bottom decorated with flowers and curves (as shown). The inside is left unplated, not even being tinned: the tortoiseshell lid is backed with copper, and is not hinged, but made to pull off. Diameter, $2\frac{1}{4}$ inches. *Circa 1760c.*

Second. Snuff-box.—Of the same construction, save that the bottom is undecorated and unplated outside. The lid bears an interesting embossed and chased allegorical coat of arms of Prussia: ("Pruss' Arms") with the motto: "Through Dearth and Through Foes"; evidently an allusion to our then friendly relations with the warlike Prussian ruler, Frederick the Great.

An exceedingly early specimen of "Sheffield Plating" which might almost be attributed to Bolsover himself. Diameter, $2\frac{1}{2}$ inches. *Circa 1750.*

Third. Snuff-box.—Of similar construction, but entirely double-plated: the lid shows an embossed "Pastoral Scene," evidently struck from a die. The bottom is decorated with a basket of fruit surrounded by conventional scrolls. Diameter, $2\frac{1}{4}$ inches. *Circa 1770.*

Fourth. Patch-box.—Lid and bottom of tortoiseshell set in Sheffield Plate: the sides decorated with chasing. Plated on one side only. The inside is not tinned, and shows the bare base metal. The lid is fitted inside with a steel mirror, for the correct adjustment of the "Patch"! Diameter, $1\frac{1}{2}$ inch. *Circa 1770.*

From the Author's Collection.



PLATE XVI

Group of Three Potato Rings

First.—Has been raised from the flat sheet and joined; the seam is almost imperceptible. Decorated with embossing, chasing, and piercing. The edges are turned over in the form of a round tube; thus the whole ring is made from one piece of metal.

This is a typical example of a potato ring of Irish manufacture. Diameter, $7\frac{1}{8}$ and $7\frac{3}{4}$ inches. Height, $4\frac{3}{4}$ inches. *Circa* 1760. The property of Ludford C. Docker, Esq.

Second.—Has been raised in the same manner, but the seam is more clearly shown. The edges are covered by flat thread-bands.

Decorated with flat-chasing and piercing, repeating tools having been used. Diameter, $7\frac{1}{8}$ and 8 inches. Height, $3\frac{1}{2}$ inches. *Circa* 1770. Irish manufacture. The property of A. J. Bethell, Esq.

Third.—Raised in the same manner; edges mounted in the same way. Pierced and flat-chased.

Diameter, 7 and $7\frac{3}{4}$ inches. *Circa* 1780. Irish manufacture. From the Author's Collection.

Potato Rings are said to have been used originally with wooden bowls, though the Author has never seen such a bowl with either a silver ring or one of Sheffield Plate.

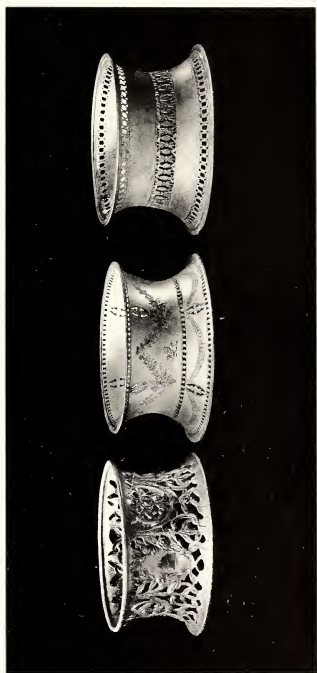


PLATE XVII

Basket (large)

Raised body decorated with saw-piercing and embossing: the foot is also pierced.

The handle, which on this example is such a special feature, is of a type seldom met with in "Sheffield Plate," though in solid silver similar handles are fairly common: it is partly constructed with the aid of dies and partly wrought.

Size, 14 by 11 inches, and 4 inches deep.

Circa 1770.

From the Collection of Viscountess Wolseley.

Basket (small)

The tiny basket is also an extremely rare type in so small a size. Its construction is similar to that of the larger specimen, save for the handle, which is plain with a mounted bead-decoration.

Size, 6 $\frac{5}{8}$ by 5 $\frac{1}{2}$ inches and 2 $\frac{1}{2}$ inches deep.

Circa 1780.

From the Collection of Viscountess Wolseley.



ILLUSTRATIONS—FIRST PERIOD

PLATE XVIII

Coffee Pot

An example of the very earliest period, plated on one side only. (A similar pot, with full description, is shown as Plate III, but here is the original handle which appears to be of rosewood.)

The four marks which appear beside the upper handle-socket are the "Imitation Silver Marks" fully described in Chapter XXII.

A pot of this design is sometimes found chased with fantastic flowers and curves. Height, $11\frac{1}{2}$ inches. *Circa 1765.*

Pint Mug

The body raised with one seam, which may be observed running down between the handle-sockets both outside and within. The foot has been made separately; a seam may also be traced on the "Box" handle. The base is fitted with a piece of mahogany. This body appears to be made from two pieces of copper-plate placed back to back, the top edge being neatly turned over. *Circa 1770*

Hot-Water Jug

Seam in the usual position; body and lid are raised and partly decorated with flat fluting: fitted with a boxwood handle. The knob is not original and is of cast solid silver; the original knob would have been mushroom-shaped. The inside is tinned. The bare edge of the lip is covered with a U-shaped silver thread.

The foot is raised, slightly loaded, and fitted with a copper-plated base. Height, $12\frac{1}{2}$ inches. *Circa 1790.* Transition Period, see Chapter XIV.

Chocolate Pot (cylindrical)

Seams may be observed on body, spout, handle-sockets, and knob. The ribbing is flat-chased; bands are applied. The knob is removable that the chocolate may be stirred without removing the lid. The inside is tinned. Height, $8\frac{1}{2}$ inches. *Circa 1790.*

Escallop Shell (one of a set of four)

Struck from a die; consists of two sheets of copper-plate placed back to back to give the appearance of double-plating; this has been so cleverly done that the two separate sheets are almost impossible to detect save under a most careful examination. The edge of the shell is skillfully turned downwards to conceal the bare copper. The three little shell feet are from dies struck in one piece. *Circa 1765.*

From the Author's Collection.



PLATE XIX

Group: Sugar and Cream Pails (to match)

The smaller of these two is for cream, the cream being served with a ladle.

The body and foot are raised; the acanthus leaves on foot and body are chased and embossed, the openwork being cut out. The foot is slightly loaded, and to finish its outer edge it is turned over on to a disc of copper-plate. The top of the body is pierced and surmounted by a decoration of beadwork; the swing handle bears the same decoration.

Double-plated, though possibly the inside has been French-plated.

The sugar-basket is precisely similar in design and construction.

These pails are undoubtedly of Irish manufacture; in certain points they lack the finish and exactness of the English-made specimens of the same period.

Circa 1770.

The property of Messrs. Wilson and Sharp.



PLATE XX

Tea Poy

Entirely raised with seam; the beadwork decoration applied; the festoons and acanthus leaves embossed. The handles are from dies. *Circa* 1780.

From the Collection of Viscountess Wolseley.



PLATE XXI

Group: Two Punch Bowls

The First.—Raised sides with seam; separate bottom. The bands are applied; the "Lion" masks from dies.

The base metal edge is covered with a hollow wire edge, which is both necessary and ornamental.

Size, 12 by $9\frac{1}{4}$ inches, and $5\frac{1}{2}$ inches deep.

The Second.—Made in similar fashion, except that the handles are hinged.

The bowl was brought to table with the glasses already fixed (as illustration), though the glass here shown is too long. Such bowls are exceedingly rare, and more often met with in French Sheffield Plate than in English.

Size, 10 by $6\frac{1}{2}$ inches, and $4\frac{1}{2}$ inches deep. *Circa 1770?*

The property of A. J. Bethell, Esq.

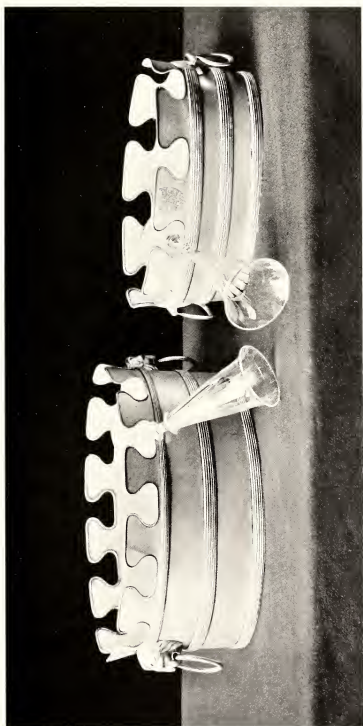


PLATE XXII

Two Cake Baskets

The *First*, boat-shaped, slightly canoed; raised body without seams, saw-pierced and flat-chased. The handle has been made in two halves, the upper part struck from a die. The foot is raised and pierced, the edge being finished with a reeded mount.

The *Second* is similar, but without the canoing, constructed in the same manner, with the exception of the foot and handle, the latter being pierced and mounted with a bead edge, and showing a join in the centre; the foot is mounted with an edge to match.

It should be observed how carefully the ends of the joints are "capped" to cover the base metal.

Size of No. 1, 13 inches (extreme length).

" No. 2, 14 inches (" "). *Circa* 1780.

The property of Messrs. Elkington.



PLATE XXIII

Basket on Three Feet

Raised and pierced body with seam; the beadwork is applied.

The feet, festoons, and rams' heads are applied die-work.

The basket is fitted with a flint glass lining. *Circa 1785.*

Basket on Oval Foot

Raised body; the foot from a die, loaded, and finished with a piece of plate.

The body is decorated with flat-chasing and piercing; the edge of the body is mounted with beadwork decoration.

The handle is partly from a die and partly raised.

Fitted with a blue glass lining. *Circa 1785.*

From the Collection of Viscountess Wolseley.



PLATE XXIV

Candlestick

This piece has been entirely struck from dies in sections. It is decorated with the "Star of Hope," and was possibly designed for Church use. Inside the socket is a workman's mark, a "B."

Height, 12 inches. *Circa* 1790.

The property of Mrs. Johnson-Brown.



PLATE XXV

Taper Stand

Wire body; the foot from a die and loaded. The body opens in the centre to admit the coil of taper; there is also an attachment by which the wick may be raised or lowered at will. There is usually also an extinguisher attached to these stands.

Such a piece is very rare and much reproduced. *Circa 1790.*
From the Collection of Viscountess Wolseley.



PLATE XXVI

Dish-Cross

Almost entirely constructed in die-work and put together in sections. These dish-crosses, which are suitable for both round and oval dishes, appear to have been much in use during the latter half of the Eighteenth, and the beginning of the Nineteenth, Century. They were made with movable branches and feet to fit a dish of any size, and are often found with a lamp in the centre for heating purposes. *Circa* 1780. From the Author's Collection.

Tea Caddy

The sides raised with seam, the bottom being separate: the lid made with a "Flush" joint. (See Chapter V, "Hinges.") The sides and lid are decorated with flat-chasing: the knob struck in two halves, the join being quite perceptible even in the illustration. *Circa* 1785. From the Author's Collection.

Salt Cellar (one of a set of four)

Plain boat-shaped canoed. The body and foot from dies; reeded mounts; gilt inside. No seams. The foot is loaded, and finished with a fitted piece of copper-plate. *Circa* 1790. From the Author's Collection.

Salt Cellar

Boat-shaped, canoed, plated on both sides. The body and foot from dies: the base of the body fluted, the upper part pierced. The edge decorated with beadwork. Fitted with a blue glass lining. Loaded foot as above. *Circa* 1875. From the Collection of Mr. A. Gordon Grant.

Salt Cellar

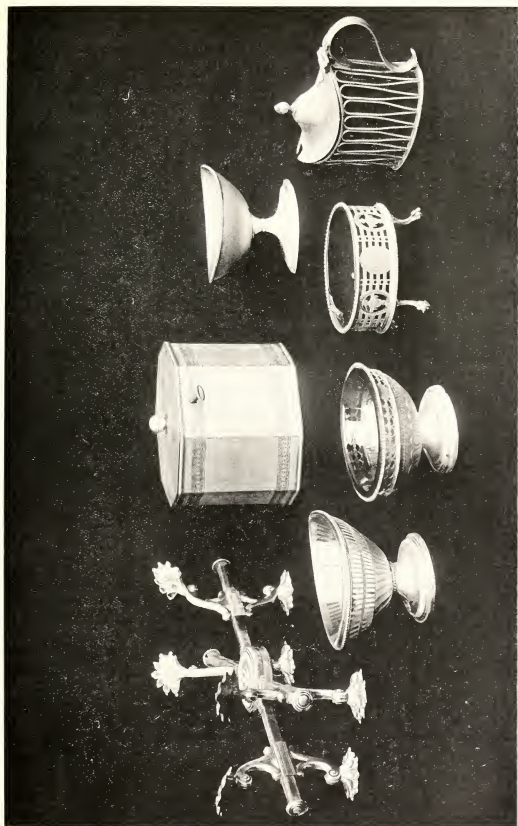
Boat-shaped, with pierced and fluted body: constructed as previous example; also with blue glass lining. Loaded foot as above. *Circa* 1785. From the Author's Collection.

Salt Cellar (one of a pair)

Oval, pierced, on four feet. The sides raised by hand, saw-pierced and flat-chased, the decorated edge being applied die-work. The "claw and ball" feet are struck from dies in two halves. Blue glass lining. *Circa* 1780. From the Author's Collection.

Mustard Pot

The body of wirework: the domed lid probably hand-raised, or from a die. The knob and hinge from dies. *Circa* 1790. From the Author's Collection.



ILLUSTRATIONS—FIRST PERIOD

PLATE XXVII

Candelabra (one of a pair)

Entirely constructed from dies. The foot is not loaded in the usual way, but plated below, two sheets of copper-plate having been struck from a die together, the reverse design showing in the bottom.

The whole 'stick' is of fine workmanship and the die-work exceedingly good. Bear the registered mark of "J. Parsons & Co." with the Cross Keys device. (See Chapter XXII, "Makers' Marks.") Height, 18½ inches. *Circa* 1785.

The property of Mrs. Johnson-Brown.

The single candlestick shows the adaptation of the candelabra to a single light.

Sweetmeat or Bon-bon Basket

Raised body, without seam, double-plated, with pierced and flat-chased decoration: raised foot with plated bottom plain flat handle with flat-chased "line" border.

Size, 7 by 5 inches. *Circa* 1780.

The property of Messrs. Wilson and Sharp.

Small baskets of this description are remarkably rare; an almost similar example is in the collection of Mr. George Wood.

Tankard (with Cover)

The body raised with one seam, the foot a separate piece. The reeded bands are applied: the box handle hand-raised: the ribbing flat-chased. Double-plated. Wire thumb-piece. The edge of the lid is covered with a U-shaped silver thread.

Height, 6 inches. *Circa* 1790. ("Transition Period." See Chapter XIV.)

From the Author's Collection.

Tea Caddy

Raised sides with seam and separate foot: beaded edges. The lid is made with a flush countersunk joint, the joint itself being entirely of solid silver to obviate the great trouble of making it in copper-plate. (See Chapter V, "Hinges.")

Height, 3¼ inches. *Circa* 1785.

From the Author's Collection.

Candlestick. (See Candelabra above.)

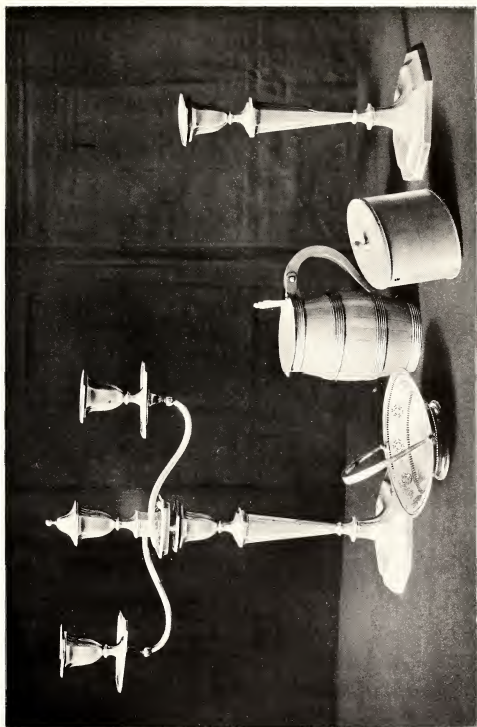


PLATE XXVIII

Butter Cooler and Stand

Oval. The sides raised and saw-pierced; one seam. The "Key Pattern" decoration is applied die-work, the foot and edge decorated with beadwork in the same manner. The lid is raised, the knob and handle-sockets from dies. The handles themselves are of square wire twisted. Fitted with a blue glass lining.

The stand is quite separate, forming an oval salver. The bottom let into the sides, which are raised with a seam and mounted with a beadwork edge. The feet are from dies.

The entire workmanship of this piece is excellent in every way, and it is seldom that an example is found exhibiting such lavish and skilful decoration.

Extreme length, $8\frac{1}{2}$ inches. *Circa* 1780.

Double Tea Caddy (for green and black tea)

Sheffield Plate *Gilt*, fitted with two locks, which suggests the days when tea was very costly.

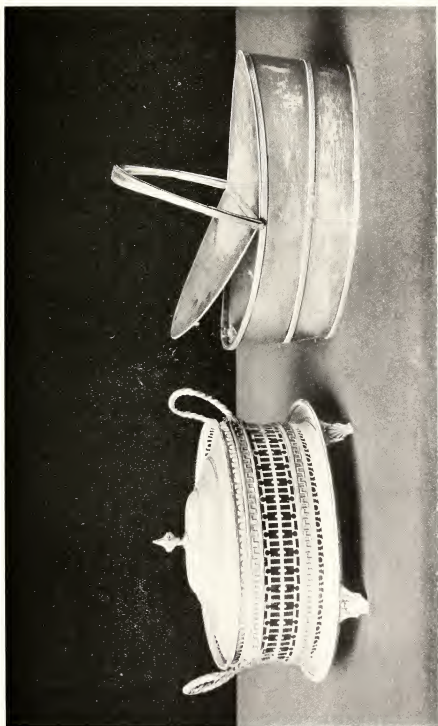
The sides are raised with separate bottom, and mounted with bands, the latter of solid silver.

The front of the handle is die-work; the lid edges are covered with a silver thread. The escutcheons are of silver, and beautifully fitted.

An extremely interesting example of Gilt Sheffield Plate.

Size, $8\frac{1}{2}$ by $4\frac{1}{4}$ inches, and $3\frac{1}{4}$ inches deep. *Circa* 1790. ("Transition Period." See Chapter XIV.)

The property of A. J. Bethell, Esq.



ILLUSTRATIONS—FIRST PERIOD

PLATE XXIX

Candelabra (one of set of four)

Round; constructed entirely from dies and put together in sections. It is interesting to observe the care taken to cover successfully the base-metal edges. The foot is loaded and green-baized.

One of the sticks is of solid silver, and bears the Sheffield Hall-Mark for 1787-8, and the maker's mark, "J. Y. & Co." (John Younge and Co.) Height, 18 inches. *Circa* 1785. The property of Mrs. Johnson-Brown. The single candlestick shows the adaptation of the Candelabra to a single light.

Argyle

The body, spout, and sockets raised with a seam; the foot loaded and finished with a piece of plate. The lid is also raised and slightly decorated with a flat-chased band; wooden handle.

The inside is fitted with a receptacle for hot water, in order to keep hot the gravy. Double-plated. *Circa* 1780. From the Author's Collection.

Argyles are as rare in Sheffield Plate as they are in silver, and good specimens are extremely difficult to find.

Wine Cooler (one of a set of four)

Entirely raised with seams; the handles from dies in sections. The top is removable to allow the placing of ice round the inside lining. The foot is finished with a piece of mahogany, and green-baized. The inside is tinned.

These Coolers, which in good condition are exceedingly rare, are really an adaptation of the "Wine Slide," and in their turn developed into the tall "Wine Cooler" that made its appearance early in the Nineteenth Century. They were undoubtedly intended to slide along the table in the same manner as the "Coaster"; unlike the taller Wine Cooler which must have remained stationary on the buffet or sideboard. Height, 6½ inches. *Circa* 1790. From the Author's Collection.

Escallop Shell (one of a pair)

Struck from a die; plated on both sides; the edge slightly decorated. On the edge of the Escallop itself the copper is now quite bare, suggesting that at one time it must have borne a coating of silver (see Plate II). The feet are from dies. These Escallop Shells are remarkably easy to imitate, and a number of very passable imitations have recently appeared on the market; it requires no little knowledge not only to detect frauds, but also not to refuse the genuine article. Size, 5½ by 5 inches. *Circa* 1780. From the Author's Collection.

Candlestick. (*See Candelabra* above.)



PLATE XXX

Sugar Bowl with Cover?

Wire body and lid with flat-chased band; plain foot. Both bowl and cover originally fitted with blue glass linings.

Such a piece is very rare in complete and original condition. *Circa 1785.*

Teapot

Raised; seams are observable on the side, handle-sockets, and spout.

The decoration is fluted and flat-chased. *Circa 1785.*

Mustard Pot

Raised with seams; decorated with piercing and flat-chasing. *Circa 1785.*

From the Collection of Viscountess Wolseley.



PLATE XXXI

Small Candlestick

Entirely constructed from die-work, the foot in four sections; the pillar and capital also struck in four sections. The edge of the foot is not turned over, but left bare; the nozzle-edge is turned over, and the nozzle itself is double-plated. The inside is loaded with pitch.

Height, $7\frac{3}{4}$ inches. *Circa 1780.*

From the Author's Collection.

Candlestick (one of a pair)

The base struck from a die in four sections; the pillar raised from the flat, its decoration having been first struck from a die; the capital from a die in four sections. The nozzle is plated on both sides, though its edge, which is turned downwards, is quite bare. The inside is loaded with pitch; the foot fitted with a piece of mahogany, and green-baized.

Height, 11 inches. *Circa 1780.*

From the Collection of Mrs. H. Newton Veitch.

Sugar Basket

The body is raised without a seam, the foot probably from a die; the bottom finished by letting in an accurately-fitting piece of copper-plate. The reeded handle is jointed with capped ends. The border is decorated with a bright-engraved solid silver band $\frac{1}{4}$ inch broad, a sufficient margin being left to turn over, covering the bare edge of the body. The inside is gilt.

Height, $6\frac{1}{2}$ inches. *Circa 1790.* ("Transition Period." See Chapter XIV.)

From the Collection of Mrs. H. Newton Veitch.

Cream Jug

The body raised with one seam; the foot constructed in a manner similar to the sugar basket described above; the edge of the mouth covered with a reeded mount.

Height, $6\frac{1}{2}$ inches. *Circa 1780.*

From the Collection of Mrs. H. Newton Veitch.

Salver

The bottom has been let into the sides, the join being clearly seen on the latter; the feet struck from dies in two halves.

This salver appears to be plated on both sides, yet the sides when examined prove to be plated on one side only, while in order to produce the semblance of double-plating, two sheets of metal have been placed back to back; whether the bottom has been treated in like manner is open to question; but its appearance certainly tends to suggest that the "Back to back" method has been used.

Diameter, $11\frac{1}{2}$ inches. *Circa 1770.*

The property of Mr. H. B. Crouch.



PLATE XXXII

Double Coaster

Almost entirely made from wire; the top mounts and handles reeded. The bottom raised with seam; mahogany base.

The double coaster is somewhat rarer than its single neighbour, and examples are to be found of very elaborate design, sometimes fitted with wheels for running ("coasting") round the table.

Probably of Scottish manufacture. *Circa 1790.*

Single Coaster

Rather an unusual form.

Raised foot with mahogany base: reeded wire rim with three supports. The base metal edge is covered with a solid silver thread edge turned completely under.

There are many names for coasters, and it is somewhat difficult to assign one correctly: in the catalogues of the day they are termed "Bottle Stands," while other names are "Decanter Stands," "Wine Slides," etc.

Circa 1790. ("Transition Period." See Chapter XIV.)

Possibly of Scottish manufacture.

The property of Mr. Muirhead Moffat.



PLATE XXXIII

Épergne (wirework)

The top basket, with the eight hanging ones, is removable, and the *épergne* is so constructed that all revolve on the central support. It is almost entirely made in wire of different sizes, shapes, and gauges; the three feet are from dies.

In its construction, when fixing the wires, the top or arched parts on each basket are hard-soldered, the ends being soft-soldered below, and covered with an oval or round piece of plate. The same applies to the foot, the arched part of the wires being again hard-soldered and the ends soft-soldered. Here is shown in an excellent manner the necessity for the use of both hard and soft solder in the construction of one piece. The arched part of each wire, it must be observed, is always hard-soldered, since the soldering surface is so small that hard solder is absolutely necessary. (See Chapter V, "Soldering.")

The wire in the bodies of the baskets is not round; it is quite flat on the inside, while on the outside it is three-sided.

Circa 1790.

The property of G. A. Bishop, Esq.



CHAPTER XIII

ORIGINAL MAKER'S CATALOGUE—FIRST PERIOD

THE following illustrations are taken from an original maker's catalogue (probably that of Messrs. Nathaniel Smith and Company, of Sheffield), which must have been published prior to 1800. The drawings are in fine line engraving, and, with the exception of one, are drawn to the full size of each article. There are shown no less than 150 candlesticks, candelabra-tops, chamber-sticks, and taper-stands: yet this is hardly surprising considering that at the time the chief, or only, method of lighting was by means of candles.

It is not without interest to note the prices of the day: the average cost of three-light candelabra appears to have been about 70s. each, though a very charming example in a harp-shaped design cost 65s. only. The three-light sconce (shown on a succeeding page), cost 75s.; the average price of 12-inch candlesticks was about 40s. per pair, 7-inch ones costing about half that sum; it was apparently usual to sell the candelabra-tops separately from the sticks. A pair of square-base sticks with the "Adam" festoon (a design much sought after to-day), is priced at 40s., while the branches to match cost an additional 48s.; at the present day such a lot would in the open market command much attention. For 6-inch square-base candlesticks the price quoted is 20s. per pair; the coveted taper-stand for spiral wick cost 14s. to 22s.

After the multitude of candlesticks appear no less than fifty patterns of salt cellar, in most instances with mustard and muffineer to match. Four are shown with richly-cut glasses set in wire stands. The two following pages are filled with designs for oval or boat-shaped salt cellars, sixteen varieties, each in its way most charming.

"Coasters" or wine-slides are next shown. Twenty-one de-

signs may be counted, pierced and flat-chased; one page of these is reproduced in this chapter. Snuffer-trays are shown in almost every possible style and in the most cultured taste. Following these appear two movable dish-stands which might be had with or without a spirit-lamp: the second is fitted with sliding legs.

Oil and vinegar frames, cruets and "soy" frames are shown in great variety; teapots, sugar baskets, and cream pails then follow; tea urns were evidently an important item with this maker, since he offers no small choice of designs. The first egg-shaped with fluted body caught up by four "pillar and claw" feet, and set upon a rounded base with four rounded feet, the design of the handles being the familiar "Lion mask and ring." Perhaps the most exquisite of all is a "classical vase" shape, decorated with "Bat's wing" fluting, flat-chased with "Adam" floral festoons and set upon a "lob" foot.

A series of coffee and hot-water jugs is next under review; these are perhaps the least pleasing feature in the whole catalogue: for while the actual body of the jug may be considered faultless in design, the spout so often seems to throw it out of line. The hot-water jugs can, however, scarcely be taxed with the same fault.

A page of cream jugs is reproduced as Plate XLI, and fully described: it is, therefore, needless to dwell on it here. The "Globe" inkstand is also reproduced and described (Plate LII); it may be noted here that these "Globes" were evidently a "favourite line" with this firm, since their catalogue shows them in several sizes with more or less elaborate fittings. Indeed, a great variety of inkstands in general is shown; one page is devoted to single bottle inkstands, circular in shape, resembling those often seen in pewter. One "boat-shaped" stand exhibits in its centre a wafer box surmounted by a hand bell; there are in all ten pages of these inkstands, each one more desirable than another.

The next article shown is the cake or bread basket: four designs of these, with swing handles, are illustrated, also two small wirework baskets without handles.

The only salver in the whole catalogue is in a perfectly plain design with beadwork edge, standing on three feet. With it are shown a tiny hot milk jug and cover, standing only $5\frac{1}{2}$ inches high.

Three toast-racks follow, then a miscellaneous page on which

the most interesting item is an escallop shell. On another page may be seen a wonderful combination egg, butter, and salt stand; the butter-dish takes the central place, surrounded by ten egg-cups, with a salt-cellar at either end. The stand is quoted as also being made to order with eight or six egg-cups, and is followed by another egg-frame for six cups, and a very charming butter-cooler.

On the last page of all appear three fish-servers, flat-chased, with pierced blades.

With the exception of a few "Transition" pieces (which are dealt with as examples of the "Transition Period"), this completes the catalogue; it can be readily understood that this eminent firm must have made an enormous amount of patterns not represented in the catalogue; yet one observes with surprise how many important pieces of plate are practically omitted; for instance, salvers and trays, sauce tureens, sauce boats, soup tureens, *entrée* dishes; with the exception of salvers the writer is aware that these goods are seldom found in Sheffield Plate at so early a date, though the same can scarcely be said of Sheffield Plate of the Second Period.

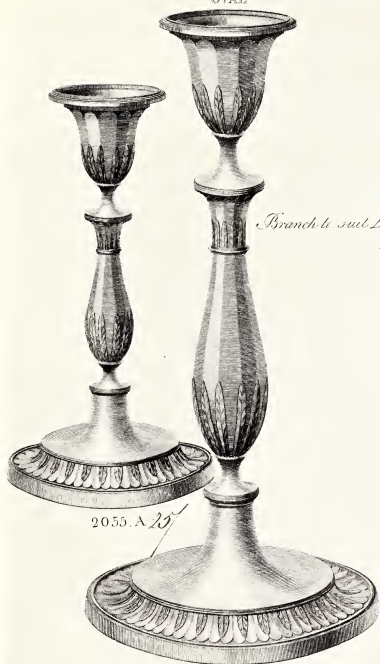
PLATE XXXIV

Catalogue Nos. 2055 and 2055a

Here are shown two Candlesticks, perhaps the most charming in the whole Catalogue. There is no mention of silver edges or mounts; one may therefore conclude that the entire piece would be made from copper-plate. With the larger 'stick is quoted the price of a branch "to suit." It should be observed that although the candlestick appears to be round it is described as oval.

Circa 1780.

OVAL



Branch le seul L^e P^euch

2055. A *25*

2055
25 Pair

PLATE XXXV

Catalogue No. 2078

Drawing of a three-branch Sconce—a most unusual piece of Sheffield Plate. Note the entire absence of any allusion to silver edges or mounts: when any part of a piece (as will be seen in the succeeding pages) is of solid silver, it is specially mentioned, and quoted sometimes with, and sometimes without, solid silver parts.

This Engraving is half size.

2078

ROUND

45/ each



The above may have either of these Tops substituted or any other in the Book

Round or Oval

PLATE XXXVI

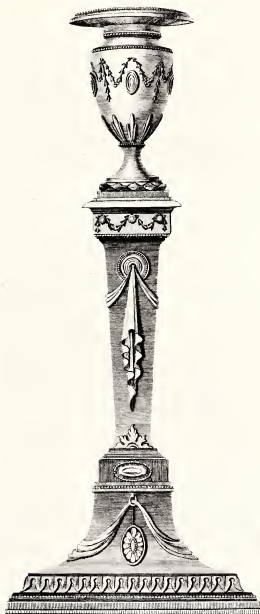
Catalogue No. 400

This is possibly the finest square 'stick in the Catalogue, standing $11\frac{1}{2}$ inches high. It is quoted with branches "to suit." The entire candelabra would indeed be an acquisition.

The price is per pair.

Circa 1770.

Branch to suit 224 Each



224

PLATE XXXVII

Catalogue Nos. 409-411

On this page appears first a Chamber 'stick of very simple design, whose lines, however, call for no improvement. A space is left for the Snuffers which are shown below. Next two tiny Chamber Candlesticks, $4\frac{1}{2}$ inches high; such sizes are seldom met with to-day.

Circa 1775.

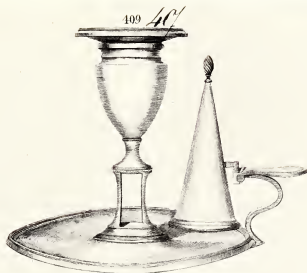
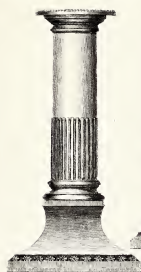


PLATE XXXVIII

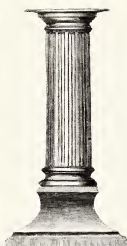
Catalogue Nos. 2000-2005

Six Candlesticks on square feet: entirely die-work: $5\frac{1}{2}$ and $6\frac{1}{2}$ inches high.

Circa 1775.



2000
20 1/2



2001
18 1/2



2002
20 1/2



2003
20 1/2



2004
26 1/2



2005
20 1/2

PLATE XXXIX

Catalogue No. 515

Here is shown a plain oval Teapot, with beadwork decoration similar to that on the pot whose making is described in Chapters IV and V. The seat is raised instead of being perfectly flat, and the decorated wreath on the side is flat chased. It does not show a hinge, and was probably made with a "pull off" lid.

Circa 1780.

Below appears a Fish Slice (No. 516) with pierced blade and beadwork decoration on the handle.

Circa 1780.

Old Sheffield Forks (as No. 517) are seldom met with to-day; one might almost question their durability. On another page in this Catalogue are given four patterns of Spoons and Forks, exhibiting the Plain Old English, Bead Edge, Feather Edge, and Fiddle patterns.

Circa 1780.

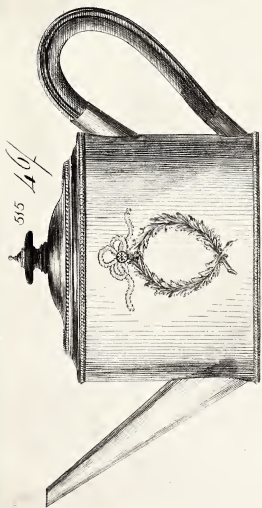
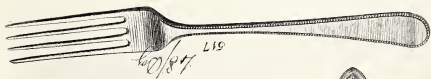


PLATE XL

Catalogue No. 944

Teapot decorated with flat-chasing.

Circa 1780.

944 58

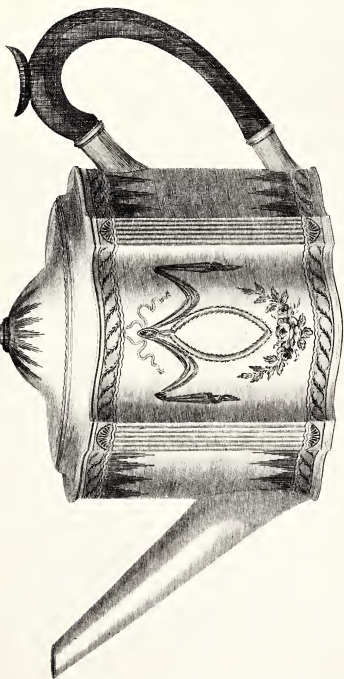


PLATE XLI

Catalogue Nos. 949-952

It would be difficult to decide which is the most perfect of these four Cream Jugs; each one is in every way so exquisitely designed.

The first, No. 949, is a plain decagonal jug on a round foot; the second, No. 950, has a lobed body and round foot, each section of the body being alternately plain and fluted. A flat-chased band runs round the top, and the front is decorated with a flat-chased shield.

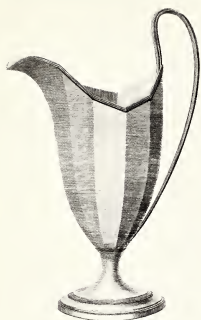
No. 951, the third Jug, has a round body and foot, and is decorated with "bat's-wing" fluting; a flat-chased band runs round the top.

The fourth Jug, No. 952, is of the same design as the first, but decorated with tiny "bat's wing" fluting at the foot of each section, and with a flat-chased border at the top and flat-chased shield in front.

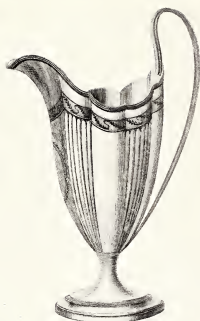
To match these Jugs would have been made a Sugar Bowl with swing handle, a Tea Caddy or Teapoy, a Teapot and Stand, and a Tea Urn.

Height of each Jug, 7 inches.

Circa 1780.



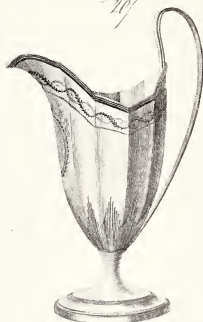
949 17/11



950 20/11



951 18/11



952 21/11

ILLUSTRATIONS (CATALOGUE)—FIRST PERIOD

PLATE XLII

Catalogue Nos. D575-P576

A miscellaneous page. Here we have:

(1) A Wine Label. The amount of designs to be found in these, even in Sheffield Plate, is almost incredible; the one shown here is comparatively plain.

(2) Six Caddy Spoons, the price of which is only 12s. per dozen. A collection of both Caddy Spoons and Wine Labels would be exceedingly interesting, the latter perhaps the more interesting of the two, as it would be possible to collect not only different designs, but labels with different names of wines thereon.

Two pairs of Sugar Tongs are shown, the one flat-chased, the other pierced in conjunction with flat-chasing.

The central piece is a Tea Caddy, an excellent drawing, similar in design to those which would serve to match the Teapots already shown. Flat-chased, and has a lock and key.

Circa 1780.



PLATE XLIII

Catalogue Nos. 995-998

On this page appear four Sugar Basins or Cream Pails; No. 995 pierced and flat-chased.

No. 996 shows a half-fluted body, with a pierced and flat-chased border above.

No. 997 is pierced and flat-chased, and has a wire running round the top to hold twelve tea-spoons. It is somewhat difficult to decide the exact purpose of the spoons; evidently each guest would be offered sugar, and would serve himself from the bowl with a spoon.

No. 998 is a plain wire basket, made up in flat wire.

Elsewhere in the same Catalogue similar baskets are quoted with Cream Pails to match, in the same design, but a size smaller. The Baskets were probably used for dessert, a little ladle being supplied with the Cream Pail.

Circa 1785.



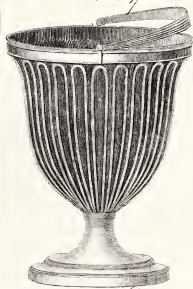
26/ra 995



996 26/



St. 122/1000 1/10
26. 26/ 997



998 26/

PLATE XLIV

Catalogue Nos. 912-914

No. 912 is a Soy Frame, holding six cut flint-glass bottles with plated tops and name labels; the bottom pierced and flat-chased, on four fluted feet.

While this is the only Soy Frame in the whole Catalogue, there are shown no less than twelve Cruets, containing from five to seven bottles, all of the finest type of design; also seven oil and vinegar frames, two fitted with mustards in the centre; and two double salts are shown, one with a mustard pot, the other with a pepper pot in the centre.

No. 914 is a Salt Cellar, boat-shaped, with a bead edge and slightly decorated foot.

Another Salt Cellar is numbered 913; it has a pierced and flat-chased border and beadwork edge. The prices are per pair.

Circa 1780.

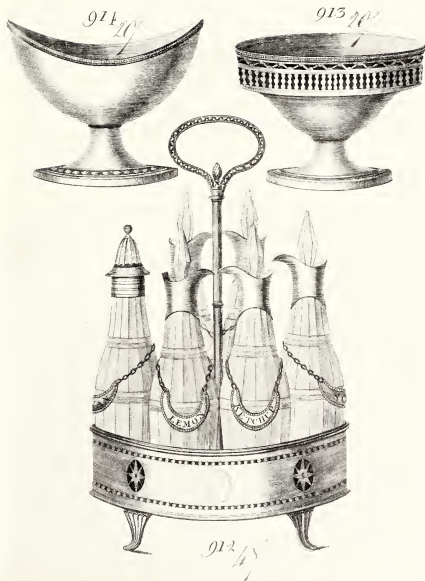


PLATE XLV

Catalogue Nos. 1011-1020

On this page appear ten Salt Cellars, all oval on four feet, but each one different in design, decorated with pierced work and flat-chasing.

A set of four or six of any of the above Salts is to-day a most desirable possession, yet the original price was only twelve to fifteen shillings a pair. The feet on all such specimens are stamped from dies.

Circa 1785.



ILLUSTRATIONS (CATALOGUE)—FIRST PERIOD

PLATE XLVI

Catalogue Nos. 557-561

No 558 is a round Mustard Pot, pierced and flat-chased.

A slightly different design appears as No. 559.

Nos. 560 and 561 are Muffineers, pierced and flat-chased.

A complete set of Salts, Mustards, and Muffineers could be made to match any one pattern of these. Pierced Mustards and Muffineers are rarely found in "Old Sheffield," and when in good condition command high prices.

An Inkstand is shown as No. 557; it contains an ink-bottle and a pounce-box for sand. In the centre is a candlestick which is removable, the base forming a box for wafers; decorated with festoons struck from a die.

Circa 1785.

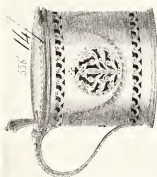
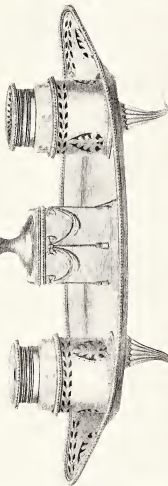


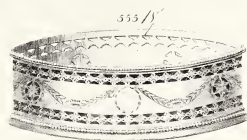
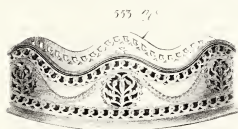
PLATE XLVII

Catalogue Nos. 552-555

Four Bottle Stands or Coasters.

In this Catalogue are shown no less than sixteen patterns of Coaster, all pierced and flat-chased, or made in wirework; the four illustrated here are undoubtedly the finest. "Coasters" have been variously called; in an original catalogue of rather later date they are described as "Decanter Stands," but are also known as "Wine Slides" and as "Bottle Stands." The bottoms are usually of mahogany. Sometimes two or more were mounted on tiny wheels in order that they might be wheeled from guest to guest.

The prices are per pair.



CHAPTER XIV

TRANSITION PERIOD

TO the eye of a connoisseur there is a world of difference between examples of the First and Second Periods of Sheffield Plate. Yet between the two there was a point of transition. Sheffield Plate underwent a gradual change for a few years at the actual close of the First Period; since it had begun to be tested and tried several faults in its construction became apparent. Chief among these was the undeniable fact that the silver wore off the angles and edges. Endeavours were therefore made to remedy this, and there is really no accounting for the methods employed by different makers. At this time also the trend of fashion was rapidly changing; the taste for neat and simple, though highly decorative pieces, was on the wane; larger, more massive, and bolder pieces were the order of the day. With very little improvement the workmanship might have remained the same; it is true that even on pieces of simple design the acute angles and the borders were inclined after hard wear to show the copper; this could only have been expected, but when the cry for bolder patterns was heard, when more acute angles were necessary and broader borders, the makers were beset with the new difficulty of successfully treating these, and placing at the same time a reliable article on the market.

In 1785 a process for covering acute angles and edges was patented by Valentine Rawle, of Cursitor Street, London. This process was only one of the many methods in vogue for covering these angles and edges; but it was evidently the forerunner of a method largely employed about the end of the eighteenth century.

Rawle's specification runs as follows:

"The nature or manner of covering the joints or acute angles, called by the makers the 'mitres or arras' of candle-

sticks, and other articles, with silver or stronger plated metal, so as to avoid showing the copper in those parts, which, according to the common method, they do before the other parts are wore, and in the common method of making square candlesticks are never covered by the maker, from the difficulty in making the mitre or joint of so long and irregular a form as a candlestick is, which is obviated as follows: When the candlestick or other article is tied together, or brought to form a piece of plain silver or strong plate metal, it must be stamped in a die or drawn in a swage tool, to give it the form required. In the same method other swages are raised, which is so well known by the manufacturers as not to need an explanation; which swage must then be overlaid or inserted in the joint, so as to completely cover it, which takes of [? off] the friction from those acute angles to which they were before exposed in cleaning; and from the thinness of the edge of the swage, it is sure to lay close to the part, and forms an additional strength to the article, not only as to shew, but by holding the joints together, which before, if only a square bent, and not soldered, was considerably weaker than the other parts, but a soldered joint was still weaker; this swage being a separate piece applied to it, gives another thickness to the part, by which its strength and durability in every respect are improved. This swage, after on, may be engraved or chased, if required, tho' better plain, on account of cleaning, and may be hard or soft solder'd, after the manner of other works."

Another and a favourite method in use about this time was to place an engraved band of silver, sometimes as much as $\frac{3}{4}$ inch broad, on the swaged band of a teapot, coffee-pot, etc. The tea urn was frequently decorated in this way, and the shield for bright engraving was placed on in similar fashion. The fact that these bands were slightly raised from the surface did not, when they were successfully fixed, deteriorate from the general artistic effect. The bands were of solid silver, and always bright engraved. Specimens of "Old Sheffield" of this period may be found where the silver is entirely worn off excepting on these bands. So skilfully were they attached to the article that only an expert can detect that they have ever been separate, and that the method of fixing used was merely very careful soldering.

About this time also makers began to put on the edges of their wares, which had been previously covered by French Plating and other methods, a thin strip of silver which was neatly turned over on either side and soldered down. This entirely concealed the copper and gave additional strength where required. Lips of hot-water jugs, coffee-pot spouts, escallop shell edges, etc., etc., were treated in this way.

ILLUSTRATIONS—TRANSITION PERIOD

PLATE XLVIII

Sauce Tureen (one of a pair)

This unusual tureen has an inside lining for hot water filled through the hinged apertures at the top of the handles.

Raised body without seam; the foot from a die.

The bright-engraved band is of silver, and is applied; as is also the engraving shield. The base-metal edges are covered with a silver U-shaped thread. The knob and handles are die-work.
Circa 1790.

The property of Messrs. Wilson and Sharp.



PLATE XLIX

Teapot (small)

This interesting "Small" teapot has been made in the usual manner save for the saw-pierced gallery and mount which are of solid silver made separately and fitted to the top of the pot. *Circa* 1790.

The property of Messrs. Wilson and Sharp.



PLATE I

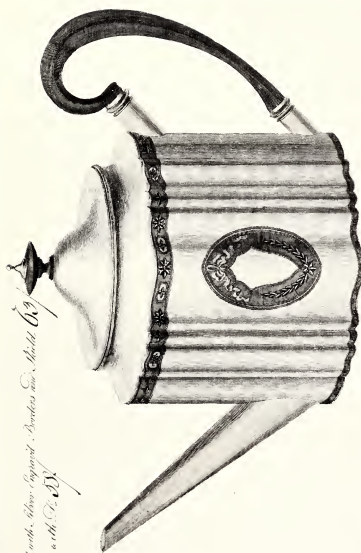
Catalogue No. 1059

Fine drawing of a "Transition" teapot: the decorated bands at the top and foot, as well as the shield, are of silver, and the decoration is bright-engraved, not flat-chased to imitate engraving. On close examination these bands will be found to be placed on the surface of the pot, so that they stand out: the shield is added in similar fashion.

The price is quoted with double- or single-plating: which means that should single-plating only be required, the inside would be tinned: the difference in cost being only 5s.

A full service to match this pot would consist of Tea Urn, Sugar Basin (helmet shape, with swing handle), Cream Ewer (helmet shape, as shown on p. viii), a Tea Caddy (as shown on p. ix), and an oval-shaped Teapot Stand, a pair of Sugar Tongs, and a Caddy Spoon.

Circa 1790.



*Crucible Teapot with Silver Engraving. Borden and Child Co.
New York City with P. D.*

PLATE LJ

Here is shown a range of Snuffer Trays which it would be difficult to surpass. Almost every conceivable shape is exhibited.

No. 981, undoubtedly the finest, is quoted with "silver threads."

No. 982, an oblong hexagonal tray. The "flat fluting" at the base and ends has a charming effect, and adds strength to the design. It is quoted "with or without silver threads."

Below (No. 983) is a shallow oval with pierced and flat-chased ends; it is quoted in the same manner as the one above.

No. 984 resembles No. 982, but is perfectly plain.

No. 985 is of the same design as No. 984, but smaller and with a perfectly plain edge.

No. 986 is a plain oval boat-shaped tray with plain edge.

Circa 1780 to 1790.

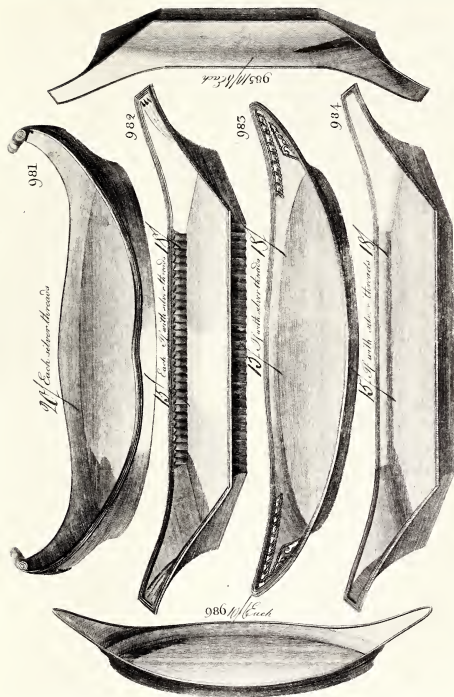


PLATE LII

Catalogue No. 1180

Globe Inkstand, of the design apparently very popular at the time this catalogue was published. A similar piece appears on another page of the catalogue.

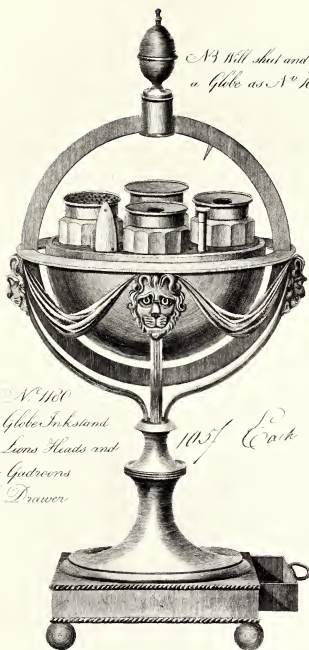
The one before us shows two ink-bottles and a pounce-box, with a fourth box for wafers. There is also a knife for making the quill pen of the day, but the use of the pencil-shaped article is not quite clear. The second Globe Ink, No. 1053, is quoted "with a Fountain Pen, price 57s." The meaning of the term "Fountain Pen" is not obvious, nor does the illustration afford any clue as to its construction.

The Lion Masks and gadroon edges of the base are described as silver.

Height, 12 inches. Diameter of globe from mask to mask, $5\frac{3}{4}$ inches. Base, 6 inches.

Circa 1800.

A similar example is in the Collection of Viscountess Wolsley.



*N^o 1153 Will shut and form
a globe as N^o 1053*

*N^o 1150
Large Globe Inkstand
Silver Lions Heads and
Silver Gudgeons
with Drawer*

1151/2 Cork

CHAPTER XV

SECOND, OR SILVER MOUNT, PERIOD—1790-1840

Process of Manufacture

DURING the Second Period of the manufacture of Sheffield Plate the base metal continued, as a rule, to be copper until the introduction of German silver, though several makers made experiments of their own to produce a white metal as a foundation for their plated wares. The reason for changing the base-metal was to avoid the showing of the copper when the plate had become worn: the use of a white metal was an improvement, since its colour was less conspicuous. One maker for some of his mounts used a metal which he called "Silveret," a composition which was evidently a mixture, probably of copper, brass, and nickel, or some similar metals which combined to form a somewhat white metal. Towards the beginning of Queen Victoria's reign a large amount of Sheffield Plate was plated on German silver, and in 1836 a process for making plate in this way was patented by Anthony Theophilus Merry, a metal dealer of Birmingham. The patent reads as follows:

"THE APPLICATION OF CERTAIN WHITE METALS, PLATED, TO CERTAIN MANUFACTURES TO WHICH IT HAS NOT BEEN HITHERTO APPLIED; In order to plate the aforesaid alloys with fine silver I melt, say, twenty or thirty pounds' weight of the softest and best German silver I can find in a casting pot, throwing in a handful of charcoal broken into small pieces, and this metal, when melted, I run into ingots of about one inch thick, three inches wide, and eight or nine inches long, or any other size I may want, more or less; I then cut or saw off the end, or get and plane or file the surface flat and clean; I then fine file, scrape or otherwise smooth the surface to be plated, taking care that every part intended to

be plated is clean, and free from oxidation or discoloration; I then take fine silver, or an alloy of silver a quarter pennyweight copper to the ounce of silver, more or less, and roll it to the proper size or thickness I may want; I then scrape or otherwise clean the silver on one side clean and bright; I then cut the rolled silver to one twentieth of an inch, or thereabouts, less than the metal to be plated, and placed the scraped or clean side upon the bright or filed metal; I then put the metal with the silver so placed on an anvil, or any other solid foundation, and place a thick piece of iron or steel with a flat face upon the silver, strike it with a sledge hammer, or stamp hammer, until I find the silver quite flat and bedded to the metal, that is, by striking it until the surface of the metal and silver touch all over; I then take a piece of flat copper, or other metal, cut the size of the silver, and about one-sixteenth of an inch thick; I then get some whitening, mix it into a paste with water, and with a brush or other means spread it over one side of the plate, and when dry I put the whitened side of this plate upon the silver, bind all three together with five or six bands of about seventeen iron wire, twisting each bank tight; I then take a little burnt borax, ground it into a paste with water, and apply it lightly round the edge of the silver, then place the metal flat in the fire of a common plating stove heated with coke, until you see the silver flush round the edge, then with great care remove it from the fire, and hold it out of the fire until the silver is set, minding at the same time to keep the metal when removed from the fire as flat as possible; I then pass it through rollers, giving it the first time a great pinch, and after this roll it in the usual way of plated metals to the width and thickness required for the article to be manufactured with it, whatever that article may be."

German silver (a mixture of nickel and brass) at the present day is wrongly described to the outside public as nickel silver; and when a shopkeeper speaks of "Electro-plate on nickel silver" he really means "Electro-plate on German silver." Merry's patent, as quoted, states with considerable plainness the reason for the use of German silver. Some makers even used a combination of both German silver and copper in the construction of their wares.

Making of the Ingot

The original method of making the copper-plate ingot remained practically the same during the Second Period of Sheffield Plate, but the furnaces were brought more up to date, and coke was used for the firing instead of charcoal. In the case of gold-plated goods, a process for making an ingot was invented by John Turner, a button-maker of Birmingham, who patented his new method in 1817.

His specification deals with "Certain improvements in the plating of copper and brass, or a mixture of copper and brass with pure or standard gold, or gold mixed with a greater portion of alloy, and in preparation of the same for rolling into sheets."

He thus describes his method: "I first prepare ingots or pieces of copper or brass, or a mixture of copper and brass, in such convenient lengths and sizes as I may require. I then clean such ingots or pieces from impurity, and make their surfaces as level as may be; I next prepare pieces or plates of pure or standard gold, or gold mixed with a greater portion of alloy, of the same or nearly of the same sizes as the ingots or pieces of metal, and of such strength or thickness as I may require; I then place a piece of pure or standard gold, or gold mixed with a greater portion of alloy, upon an ingot or piece of metal intended to be plated, and hammer and compress them both together so that they may have their surfaces as nearly equal to each other as possible. I then bind them together, either with wire or by any other method, in order to keep them in the same position during the process required to attach and combine them together. I next take silver filings, or silver cut into strips or pieces, or filings or strips of silver mixed with a portion of alloy, either of which I mix with borax, or any other salt or substance calculated to assist the fusion of the silver. Of this mixture I take a portion and place it or lay it upon and along the edge of the piece or plate of gold, and next to the ingot of metal, so that the said mixture of silver and borax, or any other salt, may lie and rest upon the edge or between the edges of the piece or plate of gold and the ingot of metal. Having thus prepared the two bodies or metals of pure or standard gold, or gold mixed with a greater portion of alloy and

copper or brass, or a mixture of copper and brass, I place them upon a fire in a stove or furnace, etc., where they remain until the silver and borax so placed along the edges of the metals melt and become in a state of fusion, and until the adhesion to, or combination of the gold with the metal is perfect. I then take the ingot carefully out of the stove or furnace, etc. By this process the ingot is plated with gold and prepared ready for rolling into sheets. I mention this as one way of combining and connecting the gold with metal by placing the ingot in a stove or furnace, etc.; but it may be effected by many other ways where sufficient heat can be applied to the gold and metal to effect the fusion of the silver and the adhesion of the gold to the copper, etc. I also effect the adhesion of the gold to the copper, etc., without the assistance or the use of any portion of silver mixed with the borax or salt, by merely using other kinds of solder, but the mode I prefer is as above stated."

Rolling

Very little difference was effected in the method of Rolling the copper-plate, though it appears probable that horse-power was to some extent superseded by steam. As early as 1767 a steam engine had been erected at the Soho Factory by Matthew Boulton. Two years later James Watt planned and constructed a second; and when Watt and Boulton became partners in 1775 they set up many engines both for their own use and for outside purchase. Considering the extensive and varied business carried on at the Soho Factory from 1788 onwards, it appears highly probable that steam power was applied to the rolling of the copper-plate; it was certainly used for many of the other works in metals for which the Soho became justly famous.

In detail, however, whatever motive power was employed, the actual process of rolling remained unchanged.

Annealing and Raising

There is no alteration to record in the method of Annealing, and articles continued to be raised in the same manner as in the early days of the manufacture.

Spinning

Spinning was brought into use early in the Second Period of the Manufacture of Sheffield Plate for lessening labour in raising articles. It was a process which could only be used in the raising of pieces of circular shape, though occasionally a clever craftsman might be found who could "spin oval."

The process of spinning may be described as follows: Upon the end of a revolving spindle was fixed a "chuck," or wooden model made to the design required: a disk of copper-plate of the necessary size was placed (and fixed by means of a centre-pin) so that it would come at will in direct contact with the "chuck." With suitable steel tools, called "burnishers," the copper-plate was moulded or gradually folded down to the shape of the chuck. The great art lay in the careful and even distribution of the metal, so that no part remained thicker than another. A vessel of spherical shape (such as the skittle-shaped teapot) was usually spun in two halves.

Spinning was not much used in the manufacture of Sheffield Plate, except for the small round parts of candlesticks; indeed it was not largely employed in the making up of solid silver wares until the latter half of the Nineteenth Century; but to-day the process is chosen by many manufacturers for making up goods, even when of a considerable size.

CHAPTER XVI

PROCESS OF MANUFACTURE—*continued*

Addition of Members

IT is not until we come to the edges and mounts that any alteration in workmanship can be recorded. Instead of, as formerly, being stamped out of copper-plate, these were now stamped out of thin pieces of solid silver. The first pieces applied in this way were the solid silver "thread" mounts and edges on the acute angles of candlesticks. As early as 1787 an attempt had been made to add silver edges, etc., to plated goods, by George Cadman and Samuel Roberts of Sheffield, who introduced a process for soldering such edges and mounts on Sheffield Plated articles to protect the parts most exposed to wear, and cover the base metal where exposed.

The more massive gadroon edge coming into fashion was soon applied in the same manner, then the "gadroon and shell edge"—finally, the "florid edge." Some of the members were also struck in solid silver: the "Lion" masks, and similar devices on tea urns, and the handles of *entrée* dishes, trays, etc. Many methods were used for fixing these borders and mounts, each maker's goods exhibiting some slight variation from his neighbour's. The best method, though one which to-day is not regarded as the most desirable, was that performed in the following way: the edge (of an *entrée* dish, for example) destined to receive the mount was first filed thin on that side to which the mount would be applied; a regular and exact margin was carefully turned back on that part to be covered by the mount, thus the bare copper edge was concealed. The mount on a dish of this description was probably quite plain; its hollow back was filled with lead solder, when the necessary length had been cut; it was then bent or shaped to position on the top of the turned-over margin;

clamps held it firmly in place, and a gentle heat was applied, any necessary extra pressure to the clamps being obtained by pieces of cork held in the hand. In this way the mount was securely soldered; and supposing the process had been successfully carried through, it was undoubtedly one of the best in use at that time, because, especially if the article were double-plated, it could hardly be detected that the whole piece had not been made from solid silver. This method of applying a mount had one great advantage: it left nothing to get out of order; moreover, the bare edge of the copper was so artfully concealed as easily to deceive the modern craftsman.

Another and more popular method, regarded by many collectors as the best, and called by them "The Turn-over Edge," was that called by the original makers "The Sign of Poverty Edge." Instead of filing and turning over the edge of the article (an *entrée* dish, for example, as before), a thin hollow thread of silver, uniform in size, and in shape somewhat like the letter U, was placed on the edge and attached with soft solder; the raw copper was thus covered, and the mount could then be added in the same manner as already described. The difference between this method and that first mentioned is that after the mount has been fixed a thin band of silver can be observed on the under side of the dish, revealing the fact that the article is plated. Moreover, these edges are inclined to come off—they do not stand hard wear, and are therefore rightly called "The Sign of Poverty." This method was much simpler; less work was involved; since in the method first described the turning over of the marginal edges required considerable skill, especially when these were curved or rounded.

Another method was that of Samuel Roberts, patented in 1824. In his own words it is specified as follows:

"AN IMPROVEMENT IN THE MANUFACTURE OF PLATED GOODS OF VARIOUS DESCRIPTIONS; I hereby declare the nature of my said Invention, and the method by which the same is effected. It consists in a new mode of preparing and putting on the ornamented silver edges upon those plated articles on which such edges are introduced. The method hitherto used with those goods when the edges are of an indented kind has been to indent by

filing the edge of the plated metal on which the ornamented silver edge is to be fitted and soldered, so as that it will correspond with the shape of the silver edge, and then either thinning the metal or soft-soldering a small silver thread (to protect it) along the indented edge. The disadvantages of these methods are obvious. By the first the raw edge of the copper must be frequently exposed conspicuously to view, if not at first, certainly after a little use. In the second the thread that is put on must at once attest that the article is a plated and not a silver one. My improved method is, after filing the edge of the article to nearly the shape (but somewhat less) of the ornamented indented silver edging, to hard-solder a silver thread of the required strength upon the said edge, and then to flat it with a hammer upon a metal stake to the breadth and strength required, and so as that the outer edge will extend a little beyond the ornamented silver edge, which is then to be soft-soldered on in the usual way. The projecting part of the hard-soldered silver edge which extends beyond the ornamented silver edge is then to be filed off, and the two edges burnished together till the joining disappears. By this method it is obvious that even a workman will scarcely be able at first sight to distinguish a plated from a silver article, and that the edges themselves will endure almost as long as solid silver ones, without the copper becoming at all perceptible."

A similar method has been seen in use on early pieces—*circa* 1790—a silver edge having been hard-soldered on to the edge of the copper-plate. Yet another method resembled this, when instead of placing the hollow thread of silver as described, the edge of the mount (after it had been struck in the die) was left on; this in itself forming a small margin. After the mount had been fixed, this margin was turned underneath. This method could only be used when the mount was fairly straight, or, at least, straight in part, a detached thread of silver being absolutely necessary for irregular corners. The two methods were often combined and appeared to give perfect satisfaction.

For the nozzles of candlesticks one maker used another process. Instead of filling the mount with solder, a "dummy" mount of tin was struck from the same die and placed inside the silver mount which it accurately fitted; the "dummy" in this case was

used instead of the usual lead solder. The whole mount was then placed in position on the nozzle, and the edge of the mount was turned over and burnished down. This dummy tin lining prevented the mount from being bent or indented, and when finished the nozzle had the appearance of being of solid silver. On certain articles requiring no mounts, when a maker did not add the U-shaped thread, a piece of solid silver was silver-soldered round the edge, to cover the bare copper. In this case there was nothing to show that the article was not silver, unless the almost imperceptible seam running right round the edge were closely examined. At the Soho factory this method was used on the linings of *soufflé* dishes.

It may be gathered from the above descriptions that the methods adopted for the addition of mounts (during the Second Period of Sheffield Plate) were subject to considerable variation: yet there can hardly be any question that the first method, when employed with success, was by far the best; it possesses the additional merit of being always used in conjunction with a silver mount of considerable thickness, since no maker would put so much work into the manipulation of his edge, and then add a mount so thin as to be unable to stand hard usage.

The articles mounted by one or another of the above methods were: *entrée* dishes, coffee trays, salvers, teapots, sugar basins, cream ewers, coffee-pots, hot-water jugs, sauce tureens, wine slides, nozzles of candlesticks, and almost every article on which the margin required to be mounted and the bare edge of the copper concealed. On certain articles a hollow thread of silver appeared sufficient, as on scallop shells, certain parts of round candlesticks, teapot lids, etc.

In the same manner were fixed the raised *repoussé* work, or other mounts, omitting the silver edge when there was no bare copper to cover, as in the case of the crown mounts of *entrée* dishes, raised work on candlesticks, and similar pieces of plate.

One peculiarity of the Second Period of Sheffield Plate is that nearly all the handles are of silver, in such instances as removable *entrée* dish handles, handles and feet on cruets, egg frames, venison dishes, and dish covers, soup tureens, sauce boats; knobs and sockets for handles were also of silver. Cake baskets

had handles of which the upper half was frequently made of silver though the lower might be of copper-plate.

Some makers even made their mounts and members of copper-plate with an extra thickness of silver to stand the necessary amount of extra wear. When handles (such as those on *entrée* dishes) were struck in two halves, the two hollow parts or sides were filled with soft solder and joined together. The top of the handle was then fixed in its socket, the upper surface of which was silver, set on to a foundation of copper plate, to which (in the case of removable handles) was fixed the "bayonet" fastening.

It must be remembered that with all these methods the same care was involved in the preparation of the mounts; the "fash" must always be filed off before applying them in order to procure a perfectly smooth surface: and whiting must be spread, where required, to prevent the overrunning of the solder. A preparation of glue and whiting was also used, as it adhered better, and did not rub off so easily while the work was in progress; moreover, it protected the work during its construction, as the workman well knew that dents or scratches must irremediably ruin any article. For this purpose also it was customary to keep moulds made of plaster of Paris in which the mounts and members could safely lie, while being filled with the lead or soft solder.

Bright-Engraving Shields

In order successfully to engrave a crest, monogram, or coat of arms on a piece of Sheffield Plate of the Second Period without showing the base metal, an extra thickness of silver was placed in the position usually allotted to crests or monograms; for example, in the centres of salvers and coffee-trays, and on *entrée* dishes, tea and coffee services, venison dishes and covers, etc.

This "Silver Shield" has recently been regarded as a very important item in the making of Sheffield Plate, and its "letting in" is supposed to have been an exceedingly difficult process; yet strangely enough it was comparatively simple.

On most pieces the shield was added in the course of construction, on others it was fixed in the plate before the workman began to make up the article; it was often difficult to decide

exactly in what position that part of the plate containing the shield might be when the article had been raised.

If the workman were about to place a shield upon a salver, he would first draw on the copper-plate an outline of the size required, using a scale for the purpose. A piece of virgin or finer silver was next taken; this was cut to the shape of, but somewhat larger than, the outline; and its edges were tapered off so slightly as to be almost imperceptibly thinner.

This piece of silver was laid over the outline; the whole was then placed on an open fire and carefully heated until it became red hot. The workman judged by experience in observing its colour when it had attained the right point of heat, and immediately proceeded to rub round the edges of the silver with a steel burnisher, keeping the work at a proper degree of heat. The burnisher was kept cool by continual dipping in cold water. He gradually worked his tool inwards, until he had quite fixed the silver shield, care being taken that no air remained between the two metals. When this had been done, the plate was removed from the fire and allowed to cool. It should be particularly noted here that neither borax nor solder was used, since the shield was made of virgin silver in order purposely to avoid using either, the difference in quality between the standard silver of the piece and the virgin silver of the shield being sufficient to cause them to adhere naturally. The plate was now laid on a stake and well hammered; the edges of the shield were carefully planished out until an absolutely smooth surface was obtained, and the join became quite imperceptible, except to the expert's eye. Should by chance any air have been allowed to remain below, the shield was pricked to allow the escape of the imprisoned air, and then rubbed down with the burnisher until the defect was concealed. The size of such shields depended to a great extent upon the size of the whole work; on small pieces it might only measure $\frac{1}{2}$ inch in diameter, in other cases as much as 5 or 6 inches. In shape it might be oblong, round, or oval. During the First Period, when a crest or monogram was engraved upon a piece of Sheffield Plate, should the engraver cut through the copper, the defect was covered by French Plating, a method scarcely satisfactory, because the sharp edges caused by the engraving were not very durable.

The introduction of "Bright-Engraving Shields" of pure silver was decidedly superior, though many of the finest pieces of "Old Sheffield" of the Second Period do not exhibit a shield, and on specimens of poor quality it is almost always omitted.

The placing of these shields was an important improvement in Sheffield Plate, though to the uninitiated it might seem almost impossible to add the extra thickness of silver without first making a cavity; nevertheless it was done. It should, of course, be clearly understood that the shield was very thin, thinner perhaps than is generally supposed, and the careful concealing of the extra layer of silver was due to the planishing out of the whole article by skilful and unsparing hammer-work.¹

Dies

During the Second Period of the manufacture of Sheffield Plate Dies continued to be used with little difference in the methods employed, save that the work was much larger than formerly. When specimens of this period are examined, especially the raised mounts and the handles and feet, astonishment arises at the amount of work that must have been lavished on the dies employed to produce such elaborate decoration.

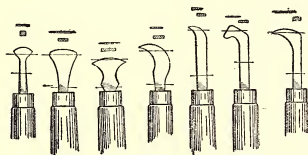
Stamping

The process of Stamping remained practically the same; indeed little or no improvement has been made in it even until the present day, though there are many patterns of press machine that to a certain extent do the work formerly done by the stamp. It is interesting to note that in 1822 William Mitchell, a silver-smith of Glasgow, took out a patent for the process of stamping.

Mitchell's method principally consisted "in the application of a water press, such as is known by the name of Brahma's press, in the manufacture of gold and silver plate and plate of other ductile metals, for the accomplishment of what has heretofore been

¹ The Author has been unable to trace either the Inventor of "Bright-engraving Shields," or the exact date of their appearance: but the latter may be fairly accurately given as about 1810.

effected in a less perfect manner by the screw press and by percussion; and I declare that to adapt such water press to this manufacture I employ two cast-iron blocks of the same diameter as the ram or piston, the lower one resting upon the piston, and the upper one fitted to the shoulder of the press, and attached to it by a bolt passing through to the top of the frame of the press; and to form a sufficient resistance to the dies employed in the manufacture when the press is in operation, I employ two circular pieces of steel ground into the blocks. And in applying the said water press to the manufacture of plate, I declare that I employ dies, such as have been hitherto used in the manufacture of plate, and having cut the metal into suitable shapes and applied it to the dies, the impression required is completed by a single operation of



STEEL BURNISHERS.

the press, and without having recourse to annealing or softening the metal."

It is difficult to say whether this patent was ever applied to any practical purpose, but it was undoubtedly a forerunner of similar methods used at the present day.

Burnishing

It is exceedingly difficult to say when the process of Burnishing was first used. In the early days of the manufacture of Sheffield Plate, articles do not seem to have been burnished to produce the bright mirror-like appearance that came into fashion during the Second Period. Burnishing, as we understand it, is contemporary with the taste of that day; show and glitter were demanded; people were not content with the subdued colour which

so beautifully showed the charming outline and minute detail of pieces made during the First Period.

When an article was finished the whole of its surface was burnished with steel or agate burnishers. These were of almost every conceivable shape, the size of their faces varying in length from $\frac{1}{4}$ inch to 1 inch. They were also bent in some cases, and pointed so that the burnisher (usually a woman) could reach the



AGATE BURNISHERS.

crevices and corners in the work. To help in the removal of any traces of the burnishing tool (which no matter how skilfully it had been used were always observable), the article was finally rouge-polished by hand, then washed, and dried with pieces of old linen sheeting.

CHAPTER XVII

GILDING

THE ancient art of Gilding has already been discussed in these pages, since the history of gilding is largely involved in that of silver-plating, and to it very little can be added. The Roman method, as described by Pliny, is quoted in the first chapter of this volume; and to the making and application of gold-leaf allusion is also made. Wherever a process for silvering a base metal was suggested, a similar process was adapted for gilding; thus, in the chapter on "Electro-plating," will be found references to the electro-gilding of copper, etc.

Until the discovery of electro-gilding, amalgamation was the method in general use, though French Plating (*i.e.*, the application of gold-leaf) was also employed to some extent. In 1698 Robert Southwell described a method of "Dry Gilding," which consisted in "steeping linen rags in a solution of gold, then burning them; and with a piece of cloth dipped in salt water rubbing the ashes over silver intended to be gilt." (This process appears similar to what is known as "Cold Gilding," described herewith.) It is not possible to say to what extent Southwell's process was ever used.

Another method of gilding is that called "Gilding in Or Moulu." This is well described by Dr. Watson in his "Chemical Essays," published in 1781, and may be quoted as follows: "There is another method of applying gold on copper which is much practised; it is called Gilding in Or Moulu. Quicksilver dissolves gold with great facility; if you spread a gold leaf (not what is called Dutch leaf, which is made of brass) on the palm of your hand, and pour a little quicksilver upon it, you will see the quicksilver absorbing the gold, just as water absorbs into its substance a piece of salt or sugar. A piece of gold of the thickness of a guinea, being rubbed with quicksilver, is soon

penetrated by it, and thereby made so fragile, that it may be broken between the fingers with ease; and if more quicksilver be added, the mixture will become a kind of paste, of different degrees of consistence, according to the quantity of quicksilver used. A piece of this paste is spread, by ways well known to the artists, upon the surface of the copper which is to be gilded in 'or moulu,' and the metal is then exposed to a proper degree of heat. Quicksilver may be evaporated in a far less degree of heat than what is required to melt either copper or gold; when therefore the mixture of gold and quicksilver is exposed to the action of fire, the quicksilver is driven off in vapour, and the gold, not being susceptible to evaporation, remains attached to the surface of the copper, and undergoing the operations of burnishing, etc., too minute to be described, becomes gilt. This method of gilding copper by means of quicksilver and gold was known to the Romans. Quicksilver will not unite with iron, and yet by an easy operation iron may be gilded in the same way that copper or silver may. The iron is first to be made bright and then immersed in a solution of blue vitriol; its surface will then become covered with a thin coat of copper, and it will then admit the gilding as if its whole substance was copper." (This method of coppering iron in order to gild it afterwards is evidently that of the "Ingenious Tradesman" alluded to by Boyle in his "Essays," and quoted in the section of this book dealing with "Electro-plating.")

There is another method of gilding known as "Cold Gilding," which consists in preparing a gilding powder by dissolving five drams of pure gold and one dram of copper in ten ounces of nitromuriatic acid. Linen rags are moistened in this solution and then burnt to ashes. These ashes will be found to contain a quantity of gold which can be applied to copper, brass, or silver by rubbing on the surface of the base metal with a cork moistened in salt and water.

The process of "Electro-gilding" as applied to practical purposes was the result of many experiments during the last years of the eighteenth and the first years of the nineteenth century; many of these are touched upon under the title of "Electro-Plating." In 1805 Brugnatelli recorded his success in gilding two large silver medals "by bringing them into communication by

means of a steel wire with the negative pole of a voltaic pile, and keeping them one after the other immersed in ammonuret of gold, newly made and well saturated." In 1840 De la Rive made known the process of Electro-gilding employed by him in 1828, by which he electro-gilt platinum and silver wires by employing them as negative electrodes in a solution of chloride of gold. In the same year De la Roulz published a method of electro-gilding; the solution he used was either chloride of gold dissolved in soda, or the same dissolved in ferrocyanide of potassium, or sulphuret of gold dissolved in neutral sulphuret of potassium. In the same year again the Comte de Fontainemoreau took out a patent (communicated to the Patent Office here) for certain improvements in covering and coating metals and alloys of metals. His first process is for gilding; the cleansing process consists of heating the articles to a red heat, and pickling them in weak sulphuric acid; they are then brushed, dried and thrown into a bath containing sulphuric and nitric acid "to give them a fine colour." When, by a subsequent use of nitric acid, they are "of a fine yellow colour," they are washed, dried, scratch-brushed and burnished. Silver articles are red heated, "thrown into an acidulated bath," taken out as soon as they are white, rubbed with wet sand, washed, and dried.

The basis of the dipping solution is either bromide, chloride, or iodide of gold. To form the first bath the basic solution is added to a solution containing certain proportions of distilled water, barytes and strontia; "for the articles, of silver they must be covered with a copper wire, or they will not gild." The second bath consists of certain proportions of the basic solution, "common water," and lithia. The third bath contains the basic solution and certain proportions of lime, magnesia, and either chloride of calcium or chloride of magnesium; this solution is particularly recommended for gilding iron articles. The fourth bath contains the basic solution and certain proportions of oxide of zinc and chloride of zinc. In the fifth bath the dissolved gold is precipitated by means of oxide of zinc; the precipitate is then boiled with certain proportions of distilled water and of chloride of barium, or of the chloride of strontium, or chloride of zinc, or chloride of lime, or chloride of magnesium. There are thus five different methods of gilding, but it is preferred to use the first bath.

It is always necessary to burnish an article after electro-gilding, and in some cases to colour it; for the latter purpose a saline solution is made to act upon the surface, and the article is heated until it assumes the desired tone. It may also be varnished with beeswax and yellow ochre, and then burnished.

The method usually employed in gilding Sheffield Plate differed from all these, but was somewhat allied to amalgamation. The necessary quantity of gold was mixed with five times its weight of mercury, and boiled in an iron ladle which had been prepared for the purpose with a coating of whiting. The two metals were then reduced to a semi-fluid state by being plunged into cold water; in this condition the gold and mercury combined to form what is called an "Amalgam." They were then squeezed through a leather bag until all the quicksilver had oozed out through the pores, the gold remaining in the bag. The amalgam was next weighed out and divided for application to the surfaces requiring to be gilt. In order to produce a chemical affinity between the gold and the metal to which it was to be applied a solution of nitrate of mercury was used. This was made by mixing with a quart of strong nitric acid a tablespoonful of quicksilver, producing a certain quantity of nitrous gas, which converted the surface of the base metal into an amalgam; to this the amalgamated gold and mercury would readily adhere. The insides of basins and jugs were gilt by brushing quicksilver over the surface, and then applying the amalgam. The article was then laid in an iron vessel over a coke fire until the heat caused the mercury to evaporate, leaving the gold securely fixed to the base metal. This process was very durable, but costly, for which reason it has practically been superseded by electro-gilding. It is not possible to gild iron or steel by the method of amalgamation, and in all methods of gilding it is best to use a base metal as nearly as possible of the colour of gold, though silver is of course often most successfully used.

During the First Period of Sheffield Plate, the insides of salt-cellsars, sugar-basins, cream-ewers and similar vessels are often to be found gold-lined or with gilt linings; occasionally, though rarely, pieces of Sheffield Plate are found of which the whole exterior is gilt. This gilding the insides of vessels was necessary to prevent

the salt or sugar eating in or oxidizing the silver if left uncovered; but even the gilding, while it was of great use, did not entirely prevent these ill-effects. Thus are accounted for the glass linings provided for many salt-cellars and sugar-basins.

The lowest standard quantity of gold allowed in gilding is 100 grains of gold to 5,760 grains of silver; the best double-gilt wire is, however, usually made in the proportion of 20 more grains of gold to the quantity of silver used. It is said that 30,000 1-inch gilt buttons can be covered with one ounce of gold, but 15,000 is a more usual quantity.

Close-Plating

Close-Plating is associated usually with the covering of steel blades of knives. As early as 1779 a patent was taken out by Richard Ellis, a goldsmith of George Street, Foster Lane, in the city of London, but he does not say to what purpose he applied his invention, and it is not until many years later that his method seems to have been fully employed for plating the steel blades of dessert knives and forks.

The patent is entitled "New Method or Mode of Plating Steel or Iron with Gold or Silver," which method is to be performed as follows: "That part of the steel or iron next where the gold or silver is to be laid on to be rubbed with borax; the gold or silver to be fitted close. The different solders used for the above purpose are as follows: one ounce standard gold, four pennyweights fine silver, and three pennyweights fine copper; one ounce fine silver and two pennyweights spelter; one ounce sterling silver and twelve grains copper, copper-brass or spelter; the solder laid on as suits the different works. The particular art in soldering depends on the care in firing it."

The usual articles plated in this way were steel or iron skewers, marrow scoops, dessert knives and forks, snuffers, etc. It is noteworthy that Ellis's patent was taken out as early as 1779, but until early in the Nineteenth Century it appears to have been but little used. Dessert knives and forks then began to be made in great quantities, and continued to be made for about forty years. About 1850 there must have been an enormous output of

these goods, which are still to be bought at exceedingly low prices. On the earlier patterns the handles are usually of pearl or ivory, plain, or carved: later they were electro-plated. They are as a rule fitted in cases in pairs of twelve, eighteen, or twenty-four.

CHAPTER XVIII

GENERAL NOTE ON THE SECOND PERIOD

IT is difficult to assign a definite reason for the change in fashion which took place at the end of the Eighteenth Century and the beginning of the Nineteenth. The simple, though highly decorated, and elegant designs in vogue about the year 1770 seem to have fallen rapidly and inexplicably into disuse: more massive pieces supplanted them. For a time the "mode" of the day evidently tended towards the French School and the Greek School under Flaxman; examples of these schools are excellent in every way, the workmanship especially being masterful and finished. It is a matter of regret that the tendency toward "massiveness" was not correctly controlled since all too soon the cry began for more florid, gaudy, heavy, showy designs, while the work was so brightened by over-indulgence in burnishing that a design, bad as it might be, was thoroughly destroyed. This unfortunate condition appears to have continued until the exit of Sheffield Plate from the world of art.

The output of goods during this period must have been enormous; and, according to a manufacturer's catalogue, consisted principally of the following: salvers (of many sizes and shapes), coffee trays, toast racks, tea and coffee sets, urns, egg cruets, cake baskets, *entrée* dishes, spoons and forks, fish slices, chamber candlesticks, snuffers and snuffer trays, mustard pots, salt cellars, decanter stands, wine coolers, wine funnels, cruets, liqueur frames, inkstands, candelabra and candlesticks, and salad stands. A "salad stand" is what is known to-day as an *épergne*, and consisted of a silver frame with one richly cut glass dish: or of a centre glass and branches holding three or four smaller glasses. A surprising amount must have been produced, during the later years of the manufacture, of goods of the cheapest possible quality;

in some cases the silver mounts added were so thin that they could not be touched by hand, but must be applied by a camel-hair brush; often, too, the silver edge in its various forms was forgotten, the bare copper edge being covered with soft solder, and by burnishing down the mount; French Plating being called into play when necessary.

Yet it must be admitted, to the credit of many makers, that to the very last their materials and workmanship continued excellent in every detail. During the Second Period of the manufacture of Sheffield Plate, the quantity of goods made must have increased to a surprising extent, especially in the towns of Sheffield and Birmingham. In the latter there were actually more makers than in Sheffield, but many of these were small firms, though at the same time several very large houses certainly existed in Birmingham. In Sheffield the trade was evidently confined to larger houses; few of the smaller firms seemed to have thrived there: the reason for this may possibly be found in the strong guilds, or unions for the protection of trades, that have always existed in Sheffield. The existence of such powers may have hindered the development in a small way of the plating industry in Sheffield, but it is difficult to speak with certainty on the subject. In any case Birmingham has always been singularly free from the control of trade guilds, and remains so to the present day.

It is possible that this was to some extent due to the influence of Matthew Boulton, who manifested a strong dislike to all such associations. He is reported to have said of his native town "that the inhabitants are too sensible of the disadvantages of such societies to wish for any, consequently every man is free to follow whatever trade or trades he pleases."

At the time when Birmingham was undergoing her period of most rapid growth (the latter end of the Eighteenth Century), Boulton was of paramount importance in his town: his factory was one of the largest; and his personality is likely to have affected not only his own immediate circle of workpeople, but the trade employees in Birmingham generally. This singular freedom from "Trades Unions" is one reason for the strange combinations of trades found in the old records of the town, where it appears that

a man could perfectly unite the grocery trade with his plating business, or advertise himself as both jeweller and publican, or gunmaker and grocer, or publican and schoolmaster! During the whole of her manufacturing career Birmingham has developed her trade as she has pleased, has made goods in her own way, and has fully earned the title of the "Workshop of the World." In Birmingham the "Sheffield Plating" trade acquired a quick and ready hold: this was no doubt because there was already being made in Birmingham a class of goods to which the new method of "plating" could easily be adapted. Vast quantities of the cheaper wares were turned out from the Birmingham workshops; she has the reputation, somewhat unenviable, of producing such a class of wares: but in the case of Sheffield Plate much of the very finest quality was made in and sent out from Birmingham, who cared little either how, or to whom, her products were sold, or who had the credit of making them, provided they found a ready market.

CHAPTER XIX

ILLUSTRATIONS—SECOND PERIOD

PLATE LIII

Tea Urn

The body is raised, one seam being observable running up between the handle. The handles, mask-heads, and lid-knob are of copper-plate; the rest of the mountings, the gadroon border round the base, the gadroon and shell border on the top of the urn, and on the lid, are of silver, as is also the gadroon edge on the spirit lamp.

There is an engraving shield of silver visible above the tap: it is applied to the body and appears slightly raised, the process known during the Second Period not having been used.

The "eagle and claw" supports are of copper-plate struck from dies; a join runs right up the centre of each. Such a join may also be traced on the lid-knob and handles.

The inside has been tinned.

In this Urn we have an excellent example of the commencement of the Second Period. It can hardly be placed among specimens of the Transition Period, as the mounts obviously belong to the Second; yet the "Mask heads" and knobs somewhat suggest the First Period.

Height, 18 inches; extreme breadth (handle to handle) 13 inches. *Circa* 1800.

The property of Messrs. Sorley.



PLATE LIV

Wire Basket

This fine wire basket is constructed on such lines and in such an excellent manner that the modern workman can but marvel at the labour entailed, more especially when he takes into consideration the fact that the construction of most pieces of Sheffield Plate was far more difficult than that of similar pieces in solid silver.

Here the top mount is raised with a seam, and surmounted with a gadroon edge, sufficient of which is left to cover the base metal.

The acanthus leaf is in copper-plate, not silver.

A separate mount has been made for the wire body, and this fixed to the "chief" mount with soft solder after the wires have been fixed with hard solder. The ends are attached below the bottom with soft solder.

The bottom is domed and gilt: not Sheffield Plate but *gilt copper*. The feet are in two halves, the join being perceptible even in the illustration. The handle is of hollow wire with mounted balls.

Observe the capped hinges and the capped scroll ends.

Size, $12\frac{1}{2}$ by 8 inches, and 5 inches deep. *Circa* 1800.

The property of Mr. J. G. May.



PLATE LV

Group: two Entrée Dishes and an Argyle

First. Entrée Dish (one of a pair).—The body and lid are raised; possibly with the help of dies; but without the "Turn-over" edge, the edge of the silver gadroon being brought up so as just to cover the copper without turning it over; it is thus difficult to detect that the dish is not silver throughout.

The handles are screwed on to an inner boss; they are of silver, and struck in two halves.

Length, 12 inches; width, $8\frac{1}{2}$ inches. *Circa* 1800.

The property of Thomas Evans, Esq.

Second. Entrée Dish with Scroll ends (one of a pair).—The body and lid are constructed by the same methods; the gadroon "Turn-over" edge and leaf-decoration are in silver, the edge being part of the mount. The fluting has been added by hand. Silver engraving shields are present, though in one case the engraver has traced his crest on the wrong side, with the result that the copper shows slightly.

The handles are of silver struck in two halves, and made with "Bayonet" fastenings.

Extreme length, 14 inches; extreme width, 9 inches. *Circa* 1810.

The property of W. H. Renwick, Esq.

Argyle.—Made in the usual manner, but with an inside lining for hot water, which is filled through the aperture opposite the spout.

The gadroon mount on the foot is of silver of an extra thickness, and turned over below to the extent of $\frac{1}{4}$ inch. The base metal edges are covered with silver.

No silver engraving shield, though it is crested and now slightly shows the base metal. *Circa* 1805.

From the Author's Collection.

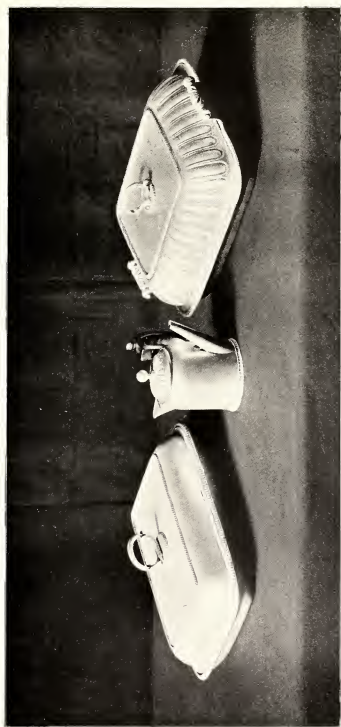


PLATE LVI

Tray

Entirely raised in one piece, the sides being raised by means of swages. The mountings and handles are of silver, the edge being covered with a silver U-shaped thread before the mount has been applied.

Double-plated. This excellent specimen has no engraving shields.

The second illustration shows the elegant "canoe" shape. Extreme length, 28 inches; breadth, 20 inches. *Circa* 1810. The property of Messrs. Sorley.



PLATE LVII

“ Warwick Vase ” Wine Cooler (one of a pair)

These excellent vases have been made in the following manner: the body, foot, and stem raised; the handles, borders, and members (of silver) struck from dies; the deeper masks struck in two halves; the handles also struck in two halves.

“ Turn-over ” edges: silver engraving shields on the lining-tops: inside tinned.

These vases may be cited as one of the finest examples of the “ Sheffield ” worker’s art; they show to perfection the various branches of workmanship, die-sinking, raising, and mounting; the vase is here faithfully carried out as it appears to-day at Warwick Castle, its adaptation as a “ cooler ” not in any way interfering with the design.

It is to be regretted that no mark is found on these specimens to betray the factory responsible for their production; they were probably London-made, or due to Matthew Boulton’s supervision.

Height, 10 inches; extreme width, $12\frac{1}{2}$ inches. *Circa* 1800.

The property of J. Topham Richardson, Esq.

A smaller pair on pedestals and bearing the small “ Pelican ” mark (Kirby, Waterhouse and Co.), were recently in the possession of Messrs. Holmes and Mapleson.



PLATE LVIII

Wine Cooler (one of a pair)

This exceedingly fine pair of coolers also shows the art of the Sheffield Plate worker at its highest level: the die-work is excellent; the cost of such a set of dies at the present day might well make tremble the most enterprising manufacturer! The entire mountings and handles are struck in silver: the base-metal edges at foot and mouth are covered by the best method, *i.e.*, the edge is turned inwards to meet the mount.

Silver engraving shields.

Extreme height, $13\frac{1}{2}$ inches; breadth, $8\frac{3}{4}$ inches. *Circa* 1810.

Mark: "Large Pelican" (Kirby Waterhouse and Co.), and a Workman's Mark.

The property of Mrs. Johnson-Brown.

An almost similar pair, standing only $12\frac{3}{4}$ inches high but with an extreme breadth of 9 inches, is also in Mrs. Johnson-Brown's Collection. They are constructed in an almost similar manner save for one or two details which reveal the work of another maker: and on close examination of the two it can be observed that different dies have been used. This second cooler bears the maker's mark of the "Cross Arrows" (Messrs. Creswick), and a Workman's Mark beside it.

Yet another pair is in the Mappin Art Gallery, Sheffield, while a pair in Sheffield Plate *Gilt* is in the possession of Messrs. Heighman.



PLATE LIX

Candelabra

Almost entirely constructed from dies. Some of the mountings are solid silver with "Turn-over" edges.

Height, 27 inches. *Circa* 1810.

Mark, "Double Sun," Soho Factory (Matthew Boulton), and Workman's Mark, a fleur-de-lis.

The property of A. C. Dickins, Esq.

A similar example, bearing the same Mark, is in the Author's Collection.



PLATE LX

Tumbling Cup

Entirely raised from a flat sheet, and so made as to leave an extra thickness of metal at the bottom: thus, no matter how placed on one side, the cup must right itself; hence its name of "Tumbler."

Height, $1\frac{3}{4}$ inch; breadth, $2\frac{1}{2}$ inches. First Period. *Circa* 1760. (See Chapter XII.)

The property of Messrs. Wilson and Sharp.

Pocket Communion Set

Flagon: the body is raised with a side seam. The Sacred Monogram engraved on a silver shield.

Paten: also shows a silver shield. The foot appears to be turned, not raised.

Chalice: gilt inside, bears a silver shield with the Monogram. The edge is uncovered, the copper being visible. *Circa* 1830.

The property of the Rev. Harold Haydn Green.

Tazza

Made in much the same manner, the bottom being separate from the swaged sides, the seam being observable. The foot probably from a die in one piece, loaded and finished with a piece of copper-plate. The edge of the dish is mounted with a silver thread mount, sufficient being left to turn completely over to cover the base metal.

Diameter, 7 inches. Height, 2 inches. *Circa* 1800. (Probably intended for church use.)

The property of Messrs. Botley and Lewis.



PLATE LXI

Taper Box.

Raised with seam: separate bottom.

The gadroon mounts are of silver with "Turn-over" edges.

The extinguisher is also raised with one seam.

The taper was kept coiled up in the inside of the box.

Circa 1800.

Snuffer Tray, with Snuffers and two Extinguishers.

Entirely raised, the smaller members being die-work.

Such a piece was placed between two table candlesticks so that the snuffers and extinguishers might be used when required.

An extremely rare and interesting specimen. *Circa* 1800.

From the Collection of Viscountess Wolseley.



PLATE LXII

*Group of Four Candlesticks (showing four sizes of one pattern)***No. 1 (one of a set of four)**

The base is entirely of copper-plate and has been struck from a die in one piece: the central part of the pillar struck in four sections. The capital of the pillar and the crown mount on the nozzle are of solid silver. The remaining portions (the circular parts between pillar and base and between capital and nozzle) have been raised or spun. Seams can be observed in all parts at all the joinings. Silver engraving-shield.

Height, $12\frac{1}{2}$ inches. Design, George II: workmanship, *circa* 1830.

They bear the Maker's Mark: a Fleur-de-lis; Waterhouse, Hodson and Co. (?).

The property of Messrs. Craibe Angus and Son.

No. 2 (one of a set of four)

Evidently of later date, but made in exactly the same manner as No. 1, except for the fact that the base metal is German silver. The only parts made in silver are the capital and crown mount, while the fitting of the nozzle alone is copper-plate.

Height, $9\frac{1}{2}$ inches. Design, George II: workmanship, *circa* 1840.

They bear the Maker's Mark: an Orb; Walker, Knowles and Co., Sheffield.

From the Author's Collection.

No. 3 (one of a pair)

The workmanship throughout is entirely the same as that of the first 'stick.

Height, 7 inches. Design, George II: workmanship, *circa* 1830.

They bear a Workman's Mark: a conventional five-petalled flower.

From the Author's Collection.

No. 4 (one of a pair)

Workmanship similar to that of the first candlestick except that the capital and the crown mount on the nozzle are copper-plate, no silver mountings being present. The base of the 'stick is plated below instead of being fitted with wood and a green baize cover in the usual manner.

Height, $5\frac{1}{4}$ inches. Design, George II: workmanship, *circa* 1830.

Unmarked.

The property of Mrs. Balfour Cockburn.

The design of these candlesticks is a copy of a silver cast 'stick made as early as the reign of George I; the removal of the nozzle on No. 4 calls attention to the fact that this candlestick was originally designed without a nozzle.

A pair of three-light candelabra (the 'stick of which is 13 inches high), is in Mr. Bleckford's possession. This pattern seems to have been so popular that it was made from the reign of George II down to the present day, in Sheffield Plate, in Electro-plate, and in Silver.

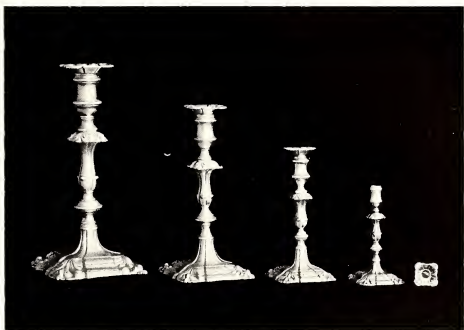


PLATE LXIII

Salver on three Feet

The feet are silver, and the edge is covered with a silver mount.

Diameter, 14 inches. *Circa* 1820.

Probably used as a bride's cake stand.

From the Author's Collection.

Coffee Pot

Made in the usual manner.

The design is contemporary with those made in the reign of George II (see Plate III), yet the workmanship is so late that the piece may with perfect accuracy be assigned to about the year 1820.

Height, 10 inches. *Circa* 1820.

From the Author's Collection.

Argyle

Constructed in the same manner as the one described on Plate LV. Here also the design might be assigned to a far earlier date, though the workmanship is as late as 1820.

Height, 6 inches. *Circa* 1820.

From the Author's Collection.

Mustard Pot

Raised sides with silver mount at top and foot: the base metal edge of the lid covered with a "Turn-over" U-shaped edge.

Design, 1800; workmanship, 1820.

From the Author's Collection.



PLATE LXIV

Centrepiece

The mountings and members are from dies struck both in copper-plate and silver; the other portions are raised or swaged.

Two of the branches are for candles, but originally they were used to hold cut-glass dishes.

Height, 13½ inches. *Circa* 1830.

From the Author's Collection.

Snuffers and Tray

The tray from a die with silver mountings; the snuffers are of steel, close-plated, with solid silver mountings, and bear the close-plater's Mark of "Harwood, Birmingham."

Circa 1830.

From the Author's Collection.

Wine Cooler (one of a pair)

Raised body with silver members and mountings; silver engraving shields. Tinned inside; no silver edges.

Height, 12 inches. Bears the maker's mark, a Bell. *Circa* 1830.

The property of Mrs. Johnson-Brown.

Entrée Dish (one of a set of four)

Double-bellowed raised and swaged body and lid. The mountings are silver; silver engraving-shields.

Size, 12 by 9 inches. *Circa* 1830.

From the Author's Collection.



PLATE LXV

Tray

This Tray, so thoroughly characteristic of its period, is constructed in the usual manner: the body raised with swaged sides: the mountings, handles and feet, all in silver, exhibit well the lavish die-work of that day.

“Turn-over” edge made separately from the mount, the irregular design of the tray's edge forbidding the use of the mount-edge.

The back is tinned.

The centre bears an engraving shield of extra large size: the decoration is flat-chased, a part of it being actually embossed, the coat of arms only being engraved.

Size, 30 by 20 inches. *Circa* 1830.

The property of Mr. Thomas Edwards.

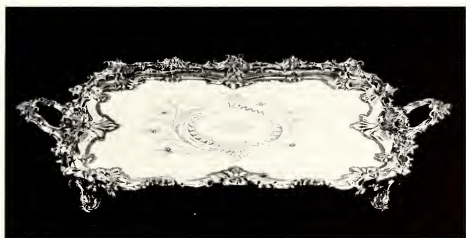


PLATE LXVI

Wine Cooler (one of a pair) on square base

The handles and vine-leaf border are of silver, struck from a die. The fluting is of copper-plate, and has been applied to the body, the body itself being raised with a seam at the side. Silver edges and engraving-shields. Inside tinned.

Height, 13 inches. *Circa* 1820.

Sauce Tureen (one of a pair)

Oblong with rounded corners and raised bellowed body, with a piece let in at the bottom. Silver mountings and borders; no silver edges or engraving-shields.

Size, 16 by 12½ inches. *Circa* 1825.

Candelabra (Seven-light, one of a set of four)

The base is die-work, and the depth of the die would require to be 4 inches. The centre pillar and branches are also die-work, chiefly struck in two halves; they are of silver and copper-plate combined.

Height, 27 inches. *Circa* 1840.

Makers: Messrs. Kirby, Waterhouse and Co. Small "Pelican" mark.

Soup Tureen (small "supper")

This piece shows a raised body with a small piece let in at the foot, though the collar has been made separately. Silver mounts and gadroon borders with "Turn-over" edges.

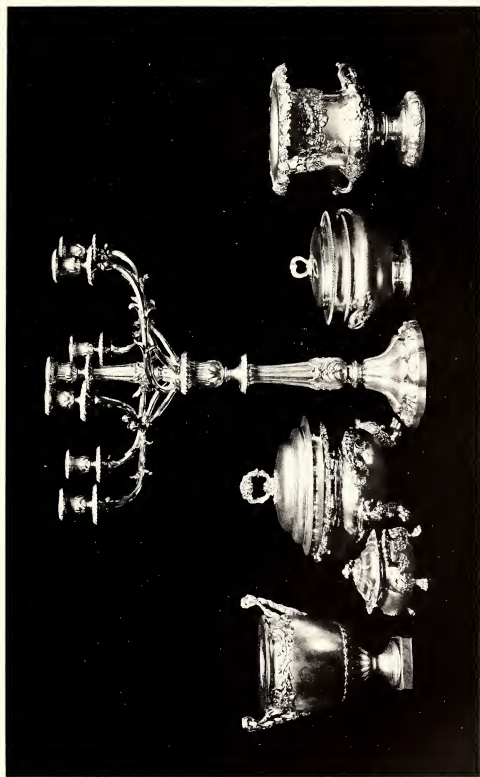
Size, 10 by 8½ inches. *Circa* 1820.

Wine Cooler (on round foot)

This has a raised body with side seam. The foot has the appearance of being spun. Silver mountings and borders; tinned inside.

Height, 10 inches. *Circa* 1835.

From Messrs. Elkington's Collection.



ILLUSTRATIONS: ORIGINAL MAKER'S CATALOGUE—SECOND PERIOD

PLATE LXVII

Salad Stand

Almost entirely struck from dies.

The legs are quoted as being made of "Silveret," which was evidently a kind of white metal ("German silver"); the other mounted parts are of silver.

The price is quoted at £7 17s. 6d.

Circa 1840.

Silver-mounted Salted Stand with ruby cut glass



The Silver-mounted Stand with the other assemblage piece, and the

PLATE LXVIII

Entrée Dish

Here is well illustrated the pattern of tableware in fashion about the end of the Georgian Period. It is quoted and illustrated—"plain" or "fluted." The border, mounts, and handles are of silver, and the lid at least shows a "Sign of Poverty" edge.

This dish cost: plain, £6; fluted, 11s. more; the fluting would be hand-work. To match this dish in either form were made soup tureens at a cost of £11, "plain," and £11 11s., "fluted"; also sauce tureens at 8os. each, "plain," and 9os., "fluted."

Chrysomelidae

 $\frac{1}{2} H_{\text{cor}} \approx 6 \text{ mbar}$

There is a table of contents

Pseudocercaria

id.

202

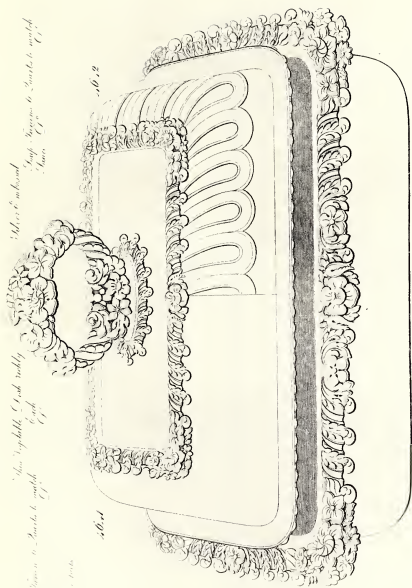


PLATE LXIX

Nothing could better show the fashion in Sheffield Plate about the year 1840 than this illustration. Here appear the florid candelabra, the *épergne*, or salad stand, the urn, tureen, tray, cups, and wine cooler.

This was the business card of William Ryland, who flourished in Birmingham about 1840.



PLATE LXIX

(To face p. 95.)

CHAPTER XX

ELECTRO-PLATING (DISCOVERED 1840)

THE workings of Nature with regard to the solution and deposition of metals are truly remarkable, and in ancient times greatly puzzled even the learned, who, when one metal became deposited upon another in obedience to some natural law, believed that a "Transmutation" of metals had taken place. The laws regarding such depositions of metals remained almost unexplored until the beginning of the Nineteenth Century, when the force of Electricity began to be studied and applied to practical use in science and manufactures.

The natural process of Electro-deposit is referred to (though never explained) by writers and travellers as early as the Seventeenth Century. In 1667 Anastasius Kirchner, in his "*China Illustrata*," describes some Chinese lakes which are said to have the power of "changing copper into iron"; in 1685 Dr. Edward Browne, in his "*Travels*," mentions his visit to the town of Herrngrundt, in Hungary, where he saw "two springs of a vitriolat water, which turn iron into copper, called the old and the new Ziment." Dr. Browne describes a gilt drinking cup, made from the above-mentioned copper, which bore this inscription: "Copper I am, but iron was of old: Silver I carry, covered am with gold."

Springs of a nature somewhat similar were also not unknown in this country; in 1678 Dr. Christopher Merret, writing of the Cornish tin mines, states that there is water containing "vitriol," "which soon changeth small iron rods put into it: and they say, that in a very little time it will assimilate the rods into its own nature."

In the year 1752 Dr. William Henry, writing of the Wicklow copper mines, states that there is in, or near them, a stream of

water containing copper, in which iron bars may be dipped to cover them with copper. Dr. John Bond, a few years later, was using this water for coating copper upon iron and tin.

During the Seventeenth Century some attempts appear to have been made to use this natural law of deposition, called by the early experimenters "the making of Copper out of iron," or "tincturing of copper upon iron." Some interesting references to these appear in the records of the Patent Office: for instance, in 1637 a Patent was granted to Thomas Whitmore, which, in the quaint language of the day, is described as: "A sp̃iall priuiledge graunted to Capten Tho. Whitmore & his ass^s (for xiiij yeares next ensuing) to practise and put in use in England and Wales the waies and meanes of making vitrioll out of copper oare, and of p̃paring copper oare and drawing water for the same, soe as by the use y^t water to make copper out of iron, and likewise of p̃paring of any manner of oare without melting the same, whereof he is the true inventor—paying to His Ma^{ty} a full 15th pte of all such copp and a tenth pte of all such silver as shal be by him, his deputies, servants, & workmen, soe made & sefated, to be paid to such psons as the Irer or chancellor of the excheq^r shall nōiate in that behalfe; wth the ordinary provisoe."

(That part of the patent which relates to making "copper out of iron" by means of certain water that is drawn from copper ore, evidently refers to coating iron with copper by means of immersion in a solution a salt of copper.)

Prince Rupert himself was noted among the metallurgists of his day, and in 1670 he patented a method for depositing copper upon iron; his "lycence" is worded as follows:

"A special lycence graunted unto his Highness Prince Rupert, his executors, adm^{rs}, and assignes, to use his new inuençons of converting into steele all manner of edges, tooles, files, and other instruments, forged and formed in soft iron, or any part of the said tools, files, and other instruments, after they are set, forged and framed, as also all manner of iron wyre after it is drawne, and of prepareing and softning all cast and melted iron soe that it may be filed and wrought as forged is, and of tinctureing of copper upon iron: to hold for 14 yeares according to the statute in this case made and provided—rendering to His Ma^{ty} the yearly

rent of 20^s: with such clauses and non obstantes as are usuall in patents of this nature."

("Tinctureing of copper upon iron" evidently refers to depositing copper upon iron by the immersion of the iron into a solution of a salt of copper.)

A curious document is also enrolled in the following year relating to the above, and concerning Prince Rupert, Lord Ashley, and Sir Thomas Chickley. "Whereas His Maj^y was lately pleased to grant unto His Highnes Prince Rupert the sole liberty of using his new invençons for converting into steele all maner of edge tooles, files, and other instruments forged and formed in soft iron, or any part of the said tooles, files, and other instruments, so forged and formed and alsoe for the converting all maner of iron wyre after it is drawne, &c, for the terme of 14 yeares from the sixth day of May last, His Maj^y doth hereby authorise and impower his said Highnes Prince Rupert, Anthony Lord Ashley, and S^r Thomas Chickley not only to take security, but alsoe to admster an oath to the severall workmen, artificers, and persons concerned in the said arts and invencons, neither directly nor indirectly to divulge or make known to any pson or persons whatsoever, except His Maj^y, his heirs or successors, the said arts or invencons or any of them, or how they are used or exercised, or with what instrum^{ts} or materialls the same are made and wrought."

(The subject-matter referred to in this patent is evidently the same as that set forth above. Decidedly the noble artificers were determined to keep secret all their methods and devices!)

Other references to the chemical experiments of that day with regard to solutions of metals may be found in the works of the Honourable Robert Boyle. In 1663, in his "Essays," he alludes to a method of silvering by means of a crystalline nitrate of silver mixed into "Chrystals of Tartar": this mixture was used for silvering brass.

Again, in 1685, in his essay: "Of Men's Great Ignorance of the Uses of Natural Things," he describes a process for gilding iron and steel by first applying a solution of copper to the iron. In his own words: "That such amalgams of Gold and Mercury, as Goldsmiths are wont to guild silver with, cannot by ordinary

wayes be made to adhere either to iron or steel, is a thing so well known among Gunsmiths, and such artificers as work upon iron, that when I enquired of several of them (as well Dutch as English) whether they could guild Iron with Water-gold (as they call that way of gilding by the help of Quick-silver,) they judg'd it a thing not to be done: and yet I know a very ingenious Tradesman, who was able to perform it, but not (that we may apply this Experiment to our present purpose,) without the assistance of another Body which was to perform one part before the Amalgam could perform the other. The Artificer's way was to coat (if I may so speak) the iron or steel to be guilt, with a coat of copper, to which purpose he us'd distill'd Liquors temper'd with other ingredients, wherein the Iron was to be immers'd with great wariness and Dexterity; for otherwise not only the Tryal would not succeed, but oftentimes the iron would be spoil'd. To obviate which inconveniences there occur'd another way of Casing the Iron with Copper, namely by Dissolving very good Vitriol that has Copper in it (for tis not every Vitriol that is fit for the purpose) in Warm Water till the Liquors be satiated with Vitriol and immersing several times into the Solution the Iron, first scoured till it be bright, and suffering it each time to dry of itself; for this Immersion being repeated often enough there will precipitate upon the Iron enough of the Cupreous parts of the dissolved Vitriol to fill all its superficial Pores with particles of Copper. So that by this safe, cheap and easie way, having as it were overlaid your Iron with Copper, you may afterwards guild it as Copper with the above mentioned Amalgam, which will adhere to the Copper though not to Iron."

Further, in 1685, in his "Specifick Medicines," he discusses the precipitation of metals, and states that if clean plates of copper be immersed in a dilute solution of silver by aquafortis, "The metal will be very slowly precipitated out of it at the beginning in the form of pure shining scales of silver, almost like the white and glittering scales of some small fishes." He goes on to say "There is also a way, by which I have brought dissolv'd gold to settle about a body, suspended in the solution in the form of a fine and highly coloured calx of pure gold. But you may easily see an instance of silent precipitation, if you do but rub a little either

Roman or Dantzick Vitriol upon the well whetted blade of a knife wetted with water or spittle, for you will have the steel, almost in a trice overlaid with a reddish substance, which by its colour and other signs, appears manifestly to be cupreous."

From the middle of the Eighteenth Century and onwards experiments were continually being made, while the chemist ceased to be regarded as a sorcerer, and Science was acquiring her rightful position in the minds of men. It is hardly possible to discuss here the many and varied experiments with regard to the deposition of one metal upon another that engaged the men of science in almost all the European countries at this time. The force, which we now know as "Electricity," was little understood and never directly used until the early years of the Nineteenth Century, when the Electric Battery was beginning to be employed, and its effect upon metals studied. A number of distinguished names now pass under review: Galvani, Wollaston, Brugnatelli, Humphrey Davy, Bessemer, Jacobi, De la Rive, Elkington; each in his way contributing in some degree to the perfecting of that process which to-day we regard with but little wonder under the name of "Electro-Plating."

The name of Elkington has always been connected with the discovery and manufacture of Electro-Plate.

For some years after 1830 George and Henry Elkington, of Birmingham, had been making experiments in methods of electro-deposition of metals. In 1836 George Elkington patented four improvements in coating and gilding metals and apparatus for the same. In the same year Henry Elkington patented three methods of silvering and gilding. In conjunction with Oglethorpe Wakelin Barrett, George Elkington in 1838 took out a patent for coating one metal by solutions of other metals. But the process which actually laid the foundation of the present successful method of electro-plating was patented in 1840. In the March of that year, George and Henry Elkington took out a patent for plating metals, etc.

The specification is thus worded:

"1st. Coating metal with silver by fusing the coating 'surface.'

"The metal (already coated with silver) is immersed into a

hot solution of nitrate of silver, and submitted 'to a temperature sufficient to expel all the acid, and leave a merely mettalic coating of silver.' The article is then placed in fused borax (the borax being 'of sufficient heat to melt silver') until the perfect fusion of the silver is effected, cooled by immersion in cold water, and the adhering borax dissolved off by dipping into boiling dilute sulphuric acid. To finish the silver surface the article may either be annealed and boiled in dilute acid or it may be electro-coated slightly, as herein-after set forth.

"2nd. Coating certain metals with silver by the use of a silver solution only, also by means of a solution of silver in connection with a galvanic current. The solution consists of oxide of silver dissolved in a solution of 'prussiate of potash (cyanide of potassium)'; this solution is used boiling. The same solution may be used cold when electric force is employed. The galvanic current is applied by means of a single cell arrangement. Other solutions are specified, but the above are preferred.

"3rd. Coating certain metals with gold by the use of a gold solution only; also by means of a solution of gold in connection with a galvanic current. A boiling solution of gold or oxide of gold in 'prussiate of potash' (cyanide of potassium?) is preferred for the dipping solution, and a cold solution of the same materials for the electro-depositing solution.

"4th. Cleaning iron, so as to render it fit to be coated with copper or other metals; the said coating to be by electric or other means. The iron is kept 'in an electro-negative state during the period of the action of the cleaning acid upon it.' The iron articles to be cleaned are electrically connected with a piece of zinc, and are then immersed into dilute sulphuric acid. The iron articles are then immersed in a brass vessel, (so as to touch the said vessel—) which contains an acid solution of sulphate of copper; thus they are firmly coated with a thin film of copper, and may then receive a further covering of copper on other metals by the usual way of applying galvanic currents for that purpose, or they may be coated by other known means."

It is believed that this silver-plating process was actually discovered by a surgeon, John Wright, a native of Sheffield, but at this time in practice in Birmingham. Attempts to produce thick

and coherent electro-deposits of silver had previously been made on behalf of the Elkingtons by Alexander Parkes; but it was Wright who discovered the need for cyanide of potassium: he submitted his process to Messrs. Elkington, and this is embodied in the Patent of 1840.

In the matter of such details in electro-plating, as applied to the practical manufacture of plated wares, much aid was rendered to Messrs. Elkington by Alexander Parkes, who continued to make experiments and improvements. In the early days it was found that the coating of silver was apt to peel off, as it did not always perfectly adhere to the base metal; or during the finishing processes it was inclined to blister. The new wares in consequence were not placed on the market without a certain amount of opposition from both the makers and retailers of Sheffield Plate. Yet in a short time the electro-plating trade began to flourish, and it speedily became remunerative, while its popularity continues even until the present day.

The metals found most suitable for electro-plating are brass, bronze, copper, and German silver (known as nickel silver); other metals, to which silver will not adhere, must first be electro-coppered. The success of the operation depends upon perfect cleanliness, to insure which the article to be plated is boiled in caustic potash to remove all grease, and plunged into dilute nitric acid to dissolve any rust which might have formed on the surface, lastly, it is scoured with fine sand. To form a cement between the article and its coating of silver it is washed with nitrate of mercury before being placed in the electric bath. The thickness of silver depends upon the time of immersion in the bath. When careful attention is paid to the strength of the battery, the temperature and proper proportions of the solution, a regular and durable coating of silver can always be obtained. The article must be polished or burnished on its removal from the bath as at first it appears of too white a colour.

It is perhaps hardly necessary to insist once more upon the difference between the above method of plating and Sheffield Plating since it has already been discussed in these pages; it is sufficient to repeat that in all processes (save the one that we

know as "Sheffield Plating") articles are plated or coated with the precious metal *after making up*, not fused together *before* being fashioned. At the present day there is only one class of goods to which the Sheffield Plating process is applied; it is used for the reflectors of all kinds of lamps, but save for these the manufacture may be called extinct. Coach-harness makers still use the method of Close-plating.

* * * * *

Thus Sheffield Plate made its exit from the world of manufactures! Once a perfectly satisfactory method of electro-plating had been exploited, its success was astonishingly spontaneous, and the old method of plating was entirely superseded. Since electro-plated goods answer all modern requirements, it is left for the connoisseur to admire and treasure his specimens of "Old Sheffield Plate" as examples of a lost art—impossible to revive! This is not the place to enter into discussions as to the respective merits of the two methods of plating, or to compare them in point of workmanship; suffice it to say that had electro-plating been invented in 1742 instead of Bolsover's method, it would have been designed and constructed in accordance with the high standard of workmanship of the day; and would have been sought after by the collector, not because it is old, but because it exhibits such qualities as no modern craftsman is able to surpass.

CHAPTER XXI

REPLATED AND "FAKED" PIECES

Replating of Old Sheffield Plate: First Period

THE replating of Sheffield Plate is an exceeding delicate subject. From a collector's point of view, pieces that are worn out are beneath attention; yet for domestic use there are many pieces which can be satisfactorily replated, and still retain much of their charm and value. When a specimen of the First Period has been well and properly replated and put back into continual use for a few years, even a clever expert can hardly detect that it is not in original condition. There is no danger of the lead within the mounts showing through, and as the designs used were simple, articles of this date are comparatively easy to replate even when entirely worn out. It is also easy to prevent the tinned backs of salvers, etc., and the insides of jugs from taking the electro-deposit.

Second Period

There is less hope of successfully replating pieces of the Second Period, and when an example is thoroughly worn out, it is almost beyond repair. The difference between the two periods is this: in the Second the mounts were made of silver filled with lead, and at the best they were none too thick. When an article has been in continual wear and the silver on its body has worn off, it will, as a rule, be found that the silver on the gadroon edges and mounts has also given way, and the lead shows its face. Even if the mounts are still in good order, immediately an attempt is made to replate a piece and it is placed in the galvanic bath, the acid therein eats into the silver or lead of the mount, leaving

it full of tiny holes, which practically ruin its appearance. It is possible to replate a piece without placing the whole of it in the battery, but this is an exceedingly difficult process, especially if a good deposit on the surface is desired. This method is much used by certain people for covering up a worn-out piece in order to sell it without betraying its imperfect state. No sooner has such an article been taken into use and cleaned a few times, than its defects are shown. Where the mount is completely worn through to the lead, it is possible to get a deposit of silver to adhere to the lead and silver; yet as soon as the article is submitted to any wear, the deposit of silver on the mount begins to peel, and the lead appears. Therefore, a specimen of Sheffield Plate whose body shows the copper badly and whose mounts are bare of silver, may be put down as entirely undeserving attention.

To detect a piece which has been replated, no matter how carefully, is simple enough if the reader will observe whether or not the mounts and acute angles show signs of wear; in spite of all wear if the article appears to be in too perfect a condition, exhibiting no trace of copper, it has almost certainly been replated. Should the crest or monogram which it may bear be rather faint, the same rule applies, whether the silver shield is present or not. In the former case the joining of the shield to the article cannot be observed. On an oval circular salver recently under review, the crest showed this fault; moreover, the back appeared rather rougher than could be expected; this was to be accounted for by the fact that the back had originally been tinned, and the whole piece had been lately electro-plated. The original joining-seams should also be traced; if these are absent, and not clearly to be observed, it is almost a certainty that the piece has been replated by the electro process.

Repairing

The repairing of Sheffield Plate which has been broken or damaged is a matter which most certainly requires to be placed in competent hands. There are exceedingly few people who seem to understand its nature, and unless care is taken even on a simple repair, a whole piece may easily be ruined.

Faked Pieces

The "Faking" (if it may be termed such) of Old Sheffield Plate has in recent years caused great annoyance to the unwary. The collector or expert dealer scarcely honours the modern imitation by giving it the title of "Faked Old Sheff."; it is so obviously neither old nor Sheffield Plate. He rarely experiences any trouble with regard to imitations save when one part only of a piece is new. The expert's eye has been so trained that he can appraise a piece of plate not only without touching it, but even while looking at it from quite a considerable distance. When specimens are so obviously wrong that his trained eye warns him at a glance that such goods are beneath his attention, their seller may well object: "But you have not examined them! How can you from that distance pronounce judgement?" And the collector can answer: "It is habit! I am so accustomed to passing such goods under review, that even at this distance I know they are not what they ought to be!"

Strangely enough quite as many genuine pieces of Old Sheffield Plate have been rejected as "Fakes" by people who ought to have better judgement and knowledge. When a piece in splendid condition "turns up," it appears so new that it is passed as quite modern, though, as a matter of fact, it may be an excellent example of the old manufacture.

Among a certain class of collectors the demand has in recent years arisen for specimens of Sheffield Plate exhibiting the "Turn-over Edge," and they have dismissed all pieces lacking this quality. As already stated in this volume, the "Turn-over" is not the best edge of its period; it was not used at all during the First Period; the original makers called it "The Sign of Poverty," because it so distinctly showed that an article was not solid silver (see Chapter XVI). Its absence should not therefore prevent the acquisition of an otherwise desirable piece.

Tests for Old Sheffield Plate

I. Seams

One of the most useful tests for Old Sheffield Plate may be described as the "Seam Test," *i.e.*, on all articles which have been

"raised," either by hand or by die-work, at all the joinings there should be a seam. Such seams are only visible on *genuine* Old Sheffield Plate; on replated pieces, or those entirely and purposely "faked," the process of electro-plating covers all the seams (see "Replating"). These joinings are always clearly to be observed when sought, though the workman was ever careful to place them in the least conspicuous place, and covered them wherever possible by the mounts, even adding these where desirable. It is not necessary to point out here where the seams on Sheffield Plate are to be found, as details are purposely given in the descriptive notes to the illustrations. But they can be traced on every piece in whose construction a join was indispensable, either on the body or on the members. The only pieces which may be excepted are shallow vessels raised without a seam; yet it is seldom that the members added to such vessels have been made without joinings.

The seam test is extremely useful, especially when applied to examples of the First Period, though it is applicable to all pieces of Sheffield Plate made as described in previous chapters; yet since specimens of the First Period exhibit no silver mountings to guide the student, no Turn-over Edge, no silver shield, the presence of seams may therefore be regarded as a reliable test. Yet the seam should never be mistaken for one which may often be observed on a badly-joined piece of electro-plate: in the case of Sheffield Plate the seam is not easily distinguished; but how does it appear when there? The join is "shown up" by the necessarily inferior quality of the silver used for soldering: if the piece has been kept clean this difference is more difficult to trace, but when carefully examined at the right place the join is quite apparent. Should the article be in a discoloured state owing to exposure to the air, the seam is easily observed. Therefore care should be taken to study a "virgin" seam in order to understand with certainty how the "Seam Test" applies.

At the present day (to the author's knowledge) there is no manufacturer who "makes up" copies of Old Sheffield Plate according to the old method; should such copies exist, this test must to some extent fall through; but the original process of manufacture is scarcely likely to be revived. The cleverest "fakes" have a tiny U-shaped thread of silver round the edges;

but even they will not stand the "Seam Test"; moreover, on no modern attempt is the thread placed with such exactness, and in so perfect a manner as on the original example. Silver mountings are often placed on imitation specimens of the Second Period, though the turn-over thread edge is omitted; again the seam test will be found useful.

II. Scraping

Another valuable test, but one not readily chosen, is that of scraping (especially on a part which has not been exposed to much wear), to ascertain the depth of the silver. If the first two or three rubs lay bare the copper, it may be confidently assumed that the piece is not genuine, but the reverse is certainly the case when many scrapings fail to reveal the base metal. It is seldom that a modern manufacturer places a very thick deposit on his electro-plated reproductions.

III. Colour

To detect Old Sheffield Plate by its colour is by no means an easy matter; as already stated in another part of this book, an enormous amount of goods electro-plated on copper have been recently placed on the market, many of which have been sold as genuine "Old Sheff."; some have been struck from the old dies, or from copies of the latter; therefore as far as design is concerned, it is difficult to discriminate between an original and its copy, especially in the case of candlesticks, candelabra, salvers, *entrée* dishes, cake baskets, bread baskets, etc., which have been largely copied; yet it can but be repeated that even solid silver, when touched up by electro-plating, looks "E. P.'d," and genuine specimens of "Old Sheffield" appear to possess a depth of colour lacking in their electro-plated imitations. They also show a slightly "leaden" tinge acquired by the fashioning and hardening of the silver over the base metal. Yet habit and experience alone can teach the "Colour Test" to any degree of reliability.

In conclusion, the following summary may be of use:

First Period

A. It can be observed by its construction when an article has been plated upon one side only.

- B.* The presence of seams is essential on body or on mountings.
- C.* The depth of silver, especially on an unworn part, can be tested by scraping.

Transition Period

- A* (as in First Period). Does not apply.
- B.* As in First Period.
- C.* As in First Period.
- D.* The presence can be ascertained of "Transition" Bright-engraved silver bands, in conjunction with the "Sign of Poverty Edge," covering the base metal at the edges; but the "Sign of Poverty" alone may be found. (The latter rule does not always apply, as it may be purposely placed on electro-plated copies.)

Second Period







- A* (as in First Period). Does not apply.
- B.* As in First Period.
- C.* As in First Period.
- D* (as in Transition Period). Does not apply.
- E.* Silver mountings should be found in conjunction with the "Sign of Poverty Edge," though some genuine specimens exhibit silver mountings only, the latter added in one of two ways, as already described.
- F.* The bright-engraved silver shield should always be looked for, as it is never placed upon modern imitations.

Another final suggestion: on examination of a piece (especially in the case of a doubtful specimen), any trace of "File-marks" should carefully be noted. The original makers of Sheffield Plate invariably avoided the use of the file on any exposed part: therefore, should such marks be found, it may be confidently asserted that the piece has either been repaired and replated, or that it is entirely a reproduction.

CHAPTER XXII





MAKERS' MARKS AND THEIR HISTORY

Examples of Earliest Marks: 1750 to 1773

MARK.	MAKER'S NAME.	CIRCA.	ARTICLE AND OWNER.	REMARKS.
	Joseph Hancock and Co.	1760	Candlesticks: The Author	
	Unknown	1760	Candlesticks: The Author	
	Thomas Law	1760	Candlesticks: Mr. John Page and Messrs. Walford and Spokes	
	Thomas Law	1760	Candlesticks: Messrs. Elkington and Mr. John Page	
	Boulton and Fothergill	1770	Tea caddy: Messrs. Bracher and Sydenham	The crown is repeated three times
	J. Hoyland and Co.	1770	Tankard: Mr. Fine	

Considerable trouble has been taken to reproduce these (and all the following) Marks as nearly as possible in exact fac-simile of those upon the original articles.

Imitation Silver Marks: 1750 to 1773

MARK.	MAKER'S NAME.	CIRCA.	ARTICLE AND OWNER.	REMARKS.
	Unknown	1760	Coffee pot: The Author Ditto: Mr. Mullins	Repeated three times; also found repeated four times
	Unknown	1760	Salver: Warwick Arms Hotel	The C is repeated twice
	Unknown	1760	Coffee pot: The Author Hotwaterjug: Messrs. Wilson and Sharp	Repeated three times; also found repeated four times
	Unknown	1760	Coffee pot: Messrs. Fraser and Co. Salver: Mr. Fennah	Ditto

The above are examples of the Marks placed on articles in exactly the same position as the Hall Mark on solid silver, and those objected to when Sheffield and Birmingham applied for Assay Offices in 1773 (see Plate III, and Chapter III, page 16).

It has been exceedingly difficult to reproduce these marks satisfactorily and the best effect has been obtained by showing the raised letters or mark in black instead of in white.

They might also be said to run contemporaneously with the examples of earliest marks, shown on the previous page.

Registered Marks

In the year 1773 an Act of Parliament was passed authorizing the establishment of an Assay Office in the towns of Sheffield and Birmingham; but owing to the wording of this Act arose doubts as to the marking of plated goods. It continued uncertain if makers of such goods were permitted to place any mark upon them. As no alteration was made in the law until 1784, it may be presumed

that few, if any, pieces of Sheffield Plate made between the years 1773 and 1784 bore any mark whatsoever.

The text of the Act of 1773 (that is to say, the clause which bears upon the present subject) reads as follows:

" Act of Parliament, 1773. Geo. 3, c. 52, s. 13

" XIII. And be it further enacted by the Authority aforesaid, that on or before the 29th Day of September next, every Silversmith or Plateworker inhabiting in either of the Towns aforesaid, or within 20 Miles of either of them, and also every Person who, at any time after the said 29th Day of September, shall follow the Trade of a Silversmith or Plateworker, before he takes upon him to exercise either of the said Trades, shall enter his Name and his Mark and Place of Abode with the Wardens of that Company nearest which he shall reside which shall be done by the said Wardens upon Demand without fee or reward: and if any such Silversmith or Plateworker shall not enter his Name and Mark and Place of Abode as aforesaid, or shall reside and carry on his said Trade in any other Place than what he has so entered as the Place of his Abode and shall not have entered his Removal, or shall strike any other Mark on Plate than what is so entered, such Silversmith or Plateworker so offending shall forfeit the sum of 100 Pounds to be recovered and disposed of as aforesaid.

" XIV. Persons counterfeiting of Marks or Stamps used by the said Companies, or transposing Stamps from one piece to another and exposing such to Sale, 'or who shall transpose or remove or cause or procure to be transposed or removed, from one piece of wrought Plate to another, or to any Plated Vessel, or to any Vessel of Base Metal, any Mark Stamp or impression made or to be made by or with any Mark or Stamp used or to be used as aforesaid by the said Companies respectively or by any Maker or Worker of Silver Plate, or any or either of them or shall sell, exchange or expose to Sale or export out of this Kingdom any Silver wrought Plate or any Vessel of Base Metal with such forged or Counterfeit Mark Stamp or impression thereon every such Person offending in any each or either of the Case aforesaid being thereof lawfully convicted shall by order of the Court before

whom such an offender shall be convicted be transported to some of His Majesty's Colonies or Plantations in America for the Term of 14 Years.

"XV. *And be it further enacted by the Authority aforesaid, that if any working Silversmith or Dealer in Wrought Plate, or any Worker or Dealer in any other Metal plated or covered with Silver, shall strike or cause to be struck any Letter or Letters upon any vessel or other Thing made of metal plated or covered with Silver, or upon any Metal Vessel or other Thing made to look like Silver, such Person or Persons so offending shall forfeit the Sum of 100 Pounds to be recovered and disposed of as aforesaid.*"

As already stated in the Introduction to this book, the reason for the wording of this Act is perhaps to be found in the objections raised by the London Assay Office, who complained that the plated wares made in imitation of solid silver plate were not only so cleverly made, but marks were placed thereon in the same position as the Hall Mark on silver, in order to deceive the uninitiated. Sheffield denied this imputation and protested against it, yet, as can be seen, the Act is so worded as to cause considerable confusion. The alteration reads as follows:

*"Act of Parliament, 24 Geo. III, c. 20. Alteration of Act of
13 Geo. III, c. 52*

"And whereas it is by the said recited Act enacted that if any working Silversmith or Dealer in Wrought Plate, or any Worker or Dealer in any other Metal plated or covered with Silver, shall strike or cause to be struck a Letter or Letters, upon any Vessel or other Thing made of Metal plated or covered with Silver, or upon any metal Vessel or other Thing made to look like Silver, such Person or Persons so offending shall be subject to the Penalty therein mentioned: and Doubts have arisen whether a Manufacturer of Goods plated with Silver can or may strike his Name upon such Goods without incurring the said Penalty: and by reason of such Doubts the Manufacturers of Goods plated with Silver have been deterred from striking their Names upon plated Goods, whereby a proper Distinction betwixt

plated Goods of the different Manufacturers is prevented, and all emulation in that Branch of Business is destroyed, to the certain and manifest prejudice of the said Manufactory: For obviating such Doubts be it further enacted by the Authority aforesaid, That it shall be lawful for any Manufacturer of Goods plated with Silver within the said Town of Sheffield, or within one Hundred Miles thereof to strike or cause to be struck upon any metal Vessel or Thing plated or covered with Silver, his or her Surname or in case of any Partnership the Name or Firm of such Partnership, and also some Mark, Figure or Device, to be struck at the end of such Surname, or other Name or Firm: such Mark, Figure or Device not being the same or in Imitation of any Mark made use of by any Assay Office established by Law for assaying of Wrought Plate, without being subject to any Penalty or Forfeiture for so doing: anything in the said Act to the contrary notwithstanding.

"III. Provided nevertheless that every such Surname or Name or Firm, as aforesaid shall be in plain and legible Characters, and struck with one Punch only: and every such Mark, Figure or Device shall before the same is made use of be submitted to the Examination of the said Company of Guardians of the said Sheffield Assay Office, and be approved of by them at some of their Public Meetings, and registered in a Book to be kept for that Purpose: for which Registry there shall be lawfully demanded and taken from any Manufacturer of Plated Goods on whose account such Registry shall be made the Sum of two Shillings and six Pence and no more.

"IV. And be it further enacted or declared That in case any Manufacturer or Manufacturers of Plated Goods within the said Town of Sheffield, or within 100 Miles thereof, shall at any Time hereafter strike any Name, Mark, Figure or Device upon his Plated Goods, which shall not have been previously registered at the said Assay Office for the said Town of Sheffield, or which shall have been previously registered at the said Office by any other Manufacturer of Plated Goods, every Person so offending shall for every such Offence, forfeit or pay to the said Wardens the Sum of 100 Pounds, to be recovered in like manner as any Penalty or Forfeiture is, by the said recited Act, authorised or

directed to be recovered and to be applied as any Money is herein-before directed to be applied."

The wording of this Act, with regard to the radius of one hundred miles from Sheffield, cannot but cause surprise; it is almost incredible that the Birmingham authorities allowed such a measure to be passed, since it compelled the Birmingham platers to register their names and marks at the Sheffield Assay Office. It must be admitted that they frequently evaded the law, with the result that Sheffield levied due fines and penalties. A petition to Parliament on behalf of the Birmingham platers in 1824 was withdrawn, owing to the opposition and influence of Sheffield; but afterwards the Birmingham platers considered themselves under no further obligation to abide by the law (though it is believed that it actually remains in force until the present day), since no Birmingham names or marks were registered at the Sheffield Assay Office after the year 1824.

It should be observed, on reading the Act of 1784 as quoted, that it was never compulsory to mark any specimen of Sheffield Plate, though makers were obliged to register a name and mark; yet it is quite possible that, while such name and device were registered, a maker never actually used them on a single piece of plate.








The marking of plated wares in the manner described was not regarded with universal favour; many makers cared little who had the credit of making goods so long as they could find a satisfactory market; many shopkeepers objected to marked goods, and deliberately chose unmarked pieces; this will account for the enormous amount of fine specimens of unmarked Old Sheffield Plate. After a time the Act of 1784 fell into abeyance, and makers marked their productions with the device only to meet the objections of the retail dealers, who in some cases put their own name on a piece beside the maker's mark. This does not seem to have met with any opposition, though it must be admitted that it is not strictly according to the Act. Yet another fault was found regarding the registered punches; it may be observed that, as the Act is worded, both the name and device must be struck with one punch only; yet no matter how these might be con-

structed, it was very difficult to make such a punch unless of considerable length. Some of those registered at Sheffield are an inch and a half long. This need not necessarily be judged as the actual size of the punch used, but only of that brought for registration purposes; the punch might be made larger or smaller at will. It must, however, have been impossible to make them shorter than half an inch, and even this length of mark would have been difficult to place on certain articles not exhibiting a flat surface without seriously damaging the piece.

Until the year 1824 there were registered at the Sheffield Assay Office seventy-seven marks of Birmingham makers, and fifty-one of Sheffield makers. From 1824 until the close of the manufacture, only four more marks were registered; these were of Sheffield makers. During the entire period only one mark was registered from beyond the one hundred miles limit; that was from London. The reason for this is not clear; probably some London maker wished to mark his goods with his own device and surname. It must be admitted that the impression conveyed by these numbers is that by far the greater number of platers in both towns evaded the law, and did not register at the Assay Office.

Mr. Arnold T. Watson, in an interesting publication, "The Sheffield Assay Office," states that he has never seen an example of Old Sheffield Plate marked with any punch registered at the Assay Office; and it is exceedingly difficult to form a complete collection of such marks from authentic pieces. Application has been made at the Sheffield Assay Office for particulars of these registered marks, and it is to be regretted that they are not forthcoming for use in this volume. The present Assay Master (Mr. Watson) states that his Office desire to publish the marks themselves, and that they are now in preparation. While it would have been interesting to include the marks they could only have been dealt with as the "Marks Registered at Sheffield"; they could not have been described as found on any piece of plate, though they would form an interesting guide to the verification of specimens, and would also help to fix dates, etc., more accurately.

Examples of Registered Marks: 1784 to circa 1810

MAKER'S NAME AND MARK.	CIRCA.	ARTICLE AND OWNER.	REMARKS.
 THOMAS LAWCE	1784	Cup: Mr. Muirhead Moffatt Mustard pot: Messrs. Debenham Storr	
 MESSRS. THE RUDDLE	1784	Mustard pot: Mr. Rudd Candlesticks: Messrs. Sorley	
 MORTON & CO.	1805	Snuffer tray: Messrs. Wilson and Sharp Salver: Mr. Harry Winstone, Junr.	Morton, not Morion. Also found with the Shield following the Shape of the bird
 DANIEL HOLY & CO.	1790	Salver: The Author Snuffer tray: The Author	
 A. GOODMAN & CO.	1810	Cream jug: Mr. Harry Symons Entrée dishes: Messrs. Robinson and Fisher Candlesticks: A. T. Cocking, Esq.	
 JOHN PARSONS & CO.	1784	Candelabra: Mrs. Johnson-Brown Candelabra: The Author	
 D. & G. HOLY & CO. SHEFFIELD	1810	Candlesticks: Mr. Robert Sawers.	









NOTE BY THE AUTHOR

I have not been able to trace a single piece of plate marked with a Birmingham maker's Registered Mark, though no less than seventy-seven were registered, a greater number than in Sheffield (see page 273).










The scarcity of these marks is rather remarkable; while there were in all about 130 registered, the actual firms who used them to any extent seem to have been one or two in Sheffield who probably had supported the Bill which proved such a failure.

Device only: 1810 to circa 1850





As already stated, the Device and Full Maker's Name soon fell into disuse, and articles when marked bore a Device only. The retailer's name and address are sometimes found beside the device, but more often the retailer's full name and address appear alone.

MARK.	MAKER'S NAME.	CIRCA.	ARTICLE AND OWNER.	REMARKS.
	Henry Wilkinson and Co.	1830	Communion flagon: Messrs. Craibe Angus Tea set: Messrs. Butt and Co.	This mark is found in several sizes. The original firm was J. Parsons and Co.
	Kirby, Waterhouse and Co.	1830	Chamber sticks: Mr. A. J. Davis Kettle and stand: Mr. Harry Symons	This mark is to be found in several sizes
	Kirby, Waterhouse and Co.	1830	Entrée dishes: Messrs. Hall and Co.	
	Walker, Knowles and Co.	1810	Entrée dishes: The Author	Ditto
	Walker, Knowles and Co.	1810	Candelabra: Messrs. Oswin	Ditto
	Walker, Knowles and Co.	1835	Snuffer tray: The Author	Ditto
	Jonathan Watson and Sons	1810	Candlesticks: Mr. Muirhead Moffatt Snuffer tray: Mr. Ince	Ditto. Original firm, Nath. Smith and Co., established 1787
	Fenton, Creswick and Co.	1820	Entrée dish: The Author Soufflé dish: Mr. Blackhurst Entrée dish - warmers: Messrs. Barraclough Candelabra: The Author	This mark has been confused with a portcullis, but it is questionable if a portcullis was ever used


Device only—*continued*

MARK.	MAKER'S NAME.	CIRCA.	ARTICLE AND OWNER.	REMARKS.
	Daniel Holy, Wilkinson and Co.	1810	Chamber sticks: The Author	Established 1765
	Roberts, Smith and Co.	1840	Soufflé dish: The Author	Established 1784. This mark is still used by the present-day successors
	Unknown	1820	Snuffer tray: Mr. Thomas Edwards Chamber stick: Messrs. Butt and Co. Wine slides: A. T. Cocking, Esq.	
	Soho Plate Company	1810	Candelabra: A. C. Dickens, Esq. Candlestick: Messrs. Blaikie Soufflé dish: Messrs. D. and M. Davis	Matthew Boulton's factory; usually repeated twice. Unless the stamp is a good impression the face is not clearly observable
	Soho Plate Company	1805	Tea pot: Mrs. H. N. Veitch Wine slides: Mr. Harry Winstone, Junr.	Ditto
	Unknown	1810	Wine coolers: Messrs. Dowell Candelabra: The Author	Believed to be associated with the Soho factory; usually repeated twice
	Waterhouse, Hodson and Co.?	1825	Candlesticks: Messrs. Craibe Angus and Son	
	Unknown	1825	Inkstand: Mr. W. Lee	Rare mark
	Unknown	1830	Candlesticks: Mr. Sydney Latimer	

Device with Maker's Initials

MARK.	MAKER'S NAME.	CIRCA.	ARTICLE AND OWNER.	REMARKS.
	R. Gainsford, Sheffield	1820	Wine coolers: Mr. J. W. Caldicutt	This mark is sometimes found with the head only
	Waterhouse, Hodson and Co. ?	1830	Entrée dishes: A. T. Cocking, Esq.	(See Jackson's "English Goldsmiths")
	J. Dixon and Sons, Sheffield ?	1840	Salver: Messrs. Blaikie Snuffer tray: Mr. H. Winstone, Jr.	Usually has a number alongside which refers to the manufacturer's descriptive number of the piece
	J. Dixon and Sons, Sheffield ?	1840	Snuffer tray: Mr. Blackhurst Mustard pot: The Author	Ditto

Patent Marks

MARK.	CIRCA.	ARTICLE AND OWNER.	REMARKS.
	1790	Candlesticks: Messrs. Walford and Spokes	Refers to the patent taken out for extenders to candlesticks
R. C. & CO. PATENT	1800	Toast rack: Messrs. Wilson and Sharp Toast rack: Messrs. Whistler	Refers to the patent taken out for the expanding rack
MORTONS PATENT	1800	Candlesticks: The Author	Refers to the patent taken out for extenders to candlesticks

Quality Marks

MARK.	CIRCA.	ARTICLE AND OWNER.	REMARKS.
BEST	1830	Entrée dishes: The Author	Refers to the quality of plating placed by certain makers as a guarantee
MEDIUM	1830	Entrée dishes: The Author	Ditto
SILVER EDGE	1830	Escallop shell: The Author	Refers to the edge on certain pieces, on which a solid "silver edge," almost imperceptible, has been hard-soldered. This mark was placed by certain makers on their goods to draw attention to this special feature. See Roberts's Patent, page 111

Initials Only

MARK.	MAKER'S NAME.	CIRCA.	ARTICLE AND OWNER.	REMARKS.
WB	Walter Baird, Glasgow?	1830	Salver: Messrs. Sergeant and Fisher	This and the four following marks are undoubtedly silversmith's "Makers' Marks."
LN	John Nicklin, Dublin?	1830	Tray: Mrs. Johnson-Brown	
LB	John Bridgman, Dublin?	1830	Entrée dishes: Mr. A. J. Brown Entrée dishes: The Author	(See Jackson's "English Goldsmiths")
JA	Unknown	1830	Entrée dishes: Messrs. Sorley	
* I-H	Unknown	1825	Winecoolers: Messrs. D. and M. Davis	

* As above blocks.

Names, and Names and Addresses

MARK.	CIRCA.	ARTICLE AND OWNER.	REMARKS.
GARRARDS. Fanton Street LONDON	1820	Hot water plate: Messrs. Blaikie	
THOMAS 55 NEW BOND ST LONDON	1820	Pint tumbler: Mr. A. J. Davis	The device, "a Crown," is sometimes found beside this name
BANNISTER	1820	Tray: Mr. R. R. Cross	W. Bannister, Birmingham maker?
SHAW	1820	Epergne: The Author	London maker
GRAY BILLITER SQUARE	1825	Tray: Mr. A. W. Pierpoint	London maker
COWIE & CO. LONG ACRE	1830	Tray: The Author	London maker
J. A. HARDY BIRMINGHAM	1830	Flagon: Messrs. Debenham, Storr and Co.	
OLDHAM MAKERS NOTTINGHAM		See List of Nottingham Makers, Chapter XXV	Tankards and measures bearing this and the following six names are to be found in the neighbourhood of Nottingham
LINDLEY MAKER NOTTINGHAM			
ASKEW MAKER NOTTINGHAM			
VARLEY MAKER NOTTINGHAM			
CLEMENTS MAKER NOTTINGHAM			
LINDLEY & ASKEW MAKERS NOTTINGHAM			
FRED HENRY MAKER NOTTINGHAM			

Names, and Names and Addresses—*continued*

MARK.	CIRCA.	ARTICLE AND OWNER.	REMARKS.
A. B. SAVORY & SONS LONDON.	1840	Entrée dish: Mr. T. Andrews	This dish also bears the following in- scription beside the name: "Sheffield. Light silver plating. 40 dwt. 8 lb. 40 dwt."

This refers to the quality of silver used; a maker bought his copper-plate by a gauge of this kind. The 40 dwt. (2 oz.) refers to the weight of silver on each side of the copper (8 lb.) before rolling. It was placed beside Messrs. Savory's name as a guarantee of good quality.





Unascribed Marks

MARK.	MAKER'S NAME.	CIRCA.	ARTICLE AND OWNER.	REMARKS.
P 5	Unknown	1840	Teapot: The Author Coffee pot: Mr. A. J. Brown	
U	Unknown	1820	Teapot: Mr. Muir- head Moffat Coffee pot: Mr. W. H. Starkey	Possibly a work- man's mark

New Marks




Towards the close of the manufacture the makers of Sheffield Plate entirely altered the style of their marks and returned to a mark somewhat resembling the original "Imitation Silver Mark." This method is still much in use to-day, but before it had come

into general use Sheffield Plating had become almost an industry of the past!

MARK.	MAKER'S NAME.	CIRCA.	ARTICLE AND OWNER.	REMARKS.
	Wilkinson and Co.?	1840	Entrée Dishes: Mr. A. J. Davis	
		1840	Candelabra: Mr. Harry Winstone, Jr.	
		1840	Knife Tray: Mr. William Pearsall	Plated on German Silver
		1840	Kettle and Stand: Mr. Robert Sawers	Ditto

Workmen's Marks

Nearly every piece of Sheffield Plate bears a Workman's Mark or Touch; this was particularly necessary in a large factory in order that if for any fault a piece should be returned to a manufacturer he could easily ascertain which workman made it. These marks are sometimes a number or tiny device, such as a fern leaf or three dots. Sometimes it is difficult to say whether they are meant for a Maker's Mark or only for that of a workman; as a rule, however, such marks are not distinctive enough for Makers' Marks.

MARK.	CIRCA.	ARTICLE AND OWNER.	REMARKS.
	1820	Altar candlesticks: Mr. T. Andrews	These marks are sometimes described as "Makers' Marks" by contemporary writers: but as a proof to the contrary it may be stated that pieces have been found bearing the workman's mark beside the maker's.
	1820	Candlesticks: The Author	
	1800	Candlesticks: The Author	

Forged Marks

It is only in recent years that "Forged Marks" have been placed on modern "Electro-plated on copper" imitations of "Old Sheffield Plate": therefore care should be taken not to let a "marked" piece unduly influence a purchase because it is marked. While it cannot be said that any marks exactly like the originals have been placed on reproductions, yet the "forged marks" are often so nearly perfect as to cause trouble to collectors.

It must also be noted that several firms, successors to original firms of "Sheffield Platers," still use the original mark of the firm on their modern electro-plate.

Little attention has ever been paid to the marks on Sheffield Plate, and it cannot be maintained that a mark, while it may add to the interest of a piece, greatly enhances its value. A fine example of "Old Sheffield" in good preservation is so difficult to obtain that the fact of its not being marked should not prevent its acquisition. The finest specimens are, to use the words of an expert, "marked all over," in the same way as are the choicest examples of old porcelain, or the unmistakably genuine unsigned picture, whose value can only be determined by their personal merit. In recent years has arisen a certain class of collectors who are far too much inclined to buy "Marks" and "Dates." It must be admitted that a mark is of importance to a collector where it points out the growth of a style, or the fluctuations of fashion: yet a would-be collector should fix his attention on the intrinsic merits of a piece, rather than on any actual "Mark," not scorning such mark or date when present, yet never choosing for the sake of mark or date only.

NOTE BY THE AUTHOR

I should be extremely grateful to any reader who would send me a specimen of any Mark not represented in this volume, at the same time stating to which Period of Sheffield Plate the piece so marked belongs, whether First or Second.

There is a very easy method of taking impressions of marks on plate:—Take a sheet of tinfoil (that used to wrap chocolate is of the most suitable thickness), cut from it a piece rather wider than the mark, and a good deal longer, so that it can be held between the fingers. Press the foil with the finger into the mark; when withdrawn it should bear a good impression. It is advisable to take three or four impressions of the same mark, and to place them in a small box without any packing.

CHAPTER XXIII

SHEFFIELD MAKERS, ETC., 1742—1857

Chronologically Arranged

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
Bolsover, Thos., Baker's Hill . .	1742	1763	Inventor.
Hancock, Joseph, Union St. . .	1752	1770?	Master Cutler, 1763.
Tudor and Leader, Sycamore Hill (or Street).	1762	1812	(Note. When one date only is given no further trace has been found.)
Tudor, Leader and Sherburn, Sycamore Hill (or Street)	1787		
Leader, T. and D., Sycamore Hill (or Street)	1805		
Winter, Parsons, and Hall, Market Place	1765		
Parsons, J. and Co., Market Place	1784	1787	Registered mark: "Cross Keys," 1784.
Law, T., ? address	1765		
Law, T. and J., Norfolk St. . . .	1768	1811	
Law, T. and Co., Baker's Hill . .	1805		
Morton, R. and Co., Brinsworth's Orchard	1765	1811	Registered mark: "A Cock," 1785.
Morton, Warris and Co., Brinsworth's Orchard	1787		
Morton, Handley, Sykes and Co., Orchard St.	1793		
Morton and Co., Orchard St. . .	1809		
Roberts, Eyre and Co., Union St.	1765	1793?	Registered mark: "Globe and Cross," 1786.
Roberts, Eyre, Beldon and Co., Union St.	1787		
Roberts, Sam and Co., Union St. .	1793		
Holy, Daniel and Co., Norfolk St.	1765		
Holy, Wilkinson and Co., Mulberry St.	1787	1829	Registered mark: "A Pipe," 1784.
Holy, Parker and Co., Mulberry St.	1809		
Holy, George and Co., Mulberry St.	1822		
Ashforth, Ellis and Co., Angel St.	1770	1811	Registered mark: "A Balance," 1784.
Ashforth, Ellis, Wilson and Hawkesley, Angel St.	1787		
Ashforth, Ellis, and Crowder, Redhill St.	1805		

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
Roberts, Cadman and Co., 8, Eyre St.	1784	Present Day	Registered mark: "A Bell," 1785.
Roberts, Smith and Co., 8, Eyre St.	1828		
Smith, Sissons and Co., 8, Eyre St.	1852		
Sissons, W. and G., 8 Eyre St.	1854		
Madin and Trickett, Farfield	1784		
Mappen, Jonathan, Far-gate	1784	1793 {	Cutlers and Platers. Plater and Cup-maker.
Sykes, John, and Dennis, Pinston Lane	1784		
Sykes and Co., Pinston Lane	1787		
Sykes, Dennis, Pinston Lane	1793		
Withers, Ben., and Co., Pinston Cross Lane	1784		
* Green, W., and Co., Eyre St.	1784	1787	Registered mark: "A Pistol," 1784.
† Burdett, John, Pea Croft	1784	1834	And in London.
Young, Greaves and Hoyland, Union St.	1784		
Young, Sons and Co., Union St.	1790		
Young, Walker and Co., Union St.	1805		
Young, Walker, Kitchen and Co., Union St.	1817		
Goodman, A., and Co. (? address)	1784	1820	Registered mark: "A Trumpet," 1800.
Bromhead, Adam (? address)	1784	1800	And in London.
Steeres, John (? address)	1784	1796	And in London.
Vining and Wennington (? address)	1784		
Vining, Chas.	1791		
Holyand Newbould, Sheffield Moor	1787		
Mitchell, Jos., and Co., Norfolk St.	1787		
Woodcraft and Birks, Ponds	1787	1817	Plated Button Maker. Ditto. Ditto. Plated Bit and Stirrup Maker. Ditto.
Brayshaw, Wm., Bridgehouses	1787		
Trickett, Haslehurst, Whiteley and Prior, Hill Foot	1787		
Vickers, Jas., Garden Walk	1787		
Vickers and Son, Garden Walk	1793		
Vickers, John, Garden Walk	1817	1817	Plater on White Metal.
Beldon, Hoyland and Co., Burgess St.	1787		
Birks, W. and J., Norfolk St.	1787		
Dewsnap, John { Queen St.	1787		
(or Dewsnap) { Arundel St., 1793	1793		
Dewsnap and Son, Arundel St.	1787	1817	Ditto.
Dewsnap, Joshua, Trinity St.	1787		
Hoyland, Clarbourn and Barnard, Hill Foot	1787		
Hunter and Twigg, Back Lane	1787		
<p>* The first firm to register a mark at the Sheffield Assay Office. † John Burdett: "Maker of Brass Dog-collars, Silver Sleeve Buttons, and Plated and Metal Seals."</p>			

* The first firm to register a mark at the Sheffield Assay Office.

† John Burdett: "Maker of Brass Dog-collars, Silver Sleeve Buttons, and Plated and Metal Seals."

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
Littlewood, John, Silver St. . . .	1787		Plated Table Knives.
{ Settle, T., and Co., Brinsworth's Orchard	1787 }	1829	Ditto.
{ Settle, J. and T., Norfolk St. . .	1817 }		
{ Settle, Gunn and Co., Norfolk St. .	1828 }		
Staniforth, Parkin and Co., Sycamore St.	1784	1787	Ditto. Registered mark: "A Dagger," 1784.
Sutcliff, Sporle and Co., King St. .	1786		Ditto.
Almond, Jas., West Bar	1787		
Deakin, Smith, and Co., Hawley Croft	1787	1793	
Fenton, Creswick, Oakes, and Co., Mulberry St., and at Hill Foot .	1787	1796?	Plated Bit and Stirrup Makers.
{ Love, John, and Co. (? address) .	1785 }	1808	Registered mark: "Dove and Olive Branch," 1785.
{ Love, Darby, and Co., Pea Croft .	1787 }		
{ Love, Morton, and Co., Pea Croft	1797 }		
{ Morton, Brown and Co., Pea Croft	1805 }		
Proctor and Co., Holles Croft . .	1787		
Rollisson Dolliff, Market St., and Spring Gardens	1787	1793	
Smith, Nath., and Co., Wain Gate	1784		Registered mark: "A Hand," 1784.
Stafford and Newton, Arundel St. .	1787		
Hopkinson, Wm. (? address) . . .	1790		
Howard, Son, and Lardner (? address)	1790	1796	
Portal Abraham (? address) . . .	1790		
Yoyng, Thos. (? address)	1790		
Dixon, Hallam, and Hudson (? address)	1793		Plated Wire Drawers.
Eadon, Kibble, { 72, Holles St. .	1793	1811	
and Weaver { Charles St., 1805			
{ Watson, Fenton, and Co., Mulberry St.	1793 }	Present Day	Registered mark: "A Ship," 1765.
{ Watson and Co., Mulberry St. . .	1805 }		
{ Watson and Bradbury, Mulberry St.	1817 }		
{ Bradbury, Thos., and Son, 24, Arundel St.	1834 }		
Froggatt, Caldwell, and Lean (? address)	1793	1797	Britannic Metal and Plated Manufacturers.
{ Kirkby, Waterhouse, and Co., Carver St.	1793 }	1848	Registered mark: "A Fleur-de-lis," 1833.
{ Waterhouse, I. and I., and Co., Carver St.	1833 }		
Smith, Knowles, Creswick, and Co., 16, Arundel St.	1793	1811	Silversmiths and Platers.
{ Broadhead, Gurney, Spoole, and Co., Angel St.	1793 }	1817 {	Britannia Metal Makers and Platers.
{ Broadhead, Sam., Angel Street .	1817 }		
Constantine, Rich., Scotland St. .	1793	1817	Ditto.

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
{ Ellis, Tucker, Machin and Co. (?Machon and Whitelock as in London, 1796) (?address) . . .	1793		
Fenton and Co. (? Tucker, Fenton and Co. as in London, 1806), Norfolk St.	1817	1845	And in London.
Fenton, Allinson and Machin (or Machon), Norfolk St.	1822		
Machon, J. and W. and Co., 19, Norfolk St.	1845		
Hancock and Jessop	1793		British Metal Makers and Platers.
Read, Lucas and Read, Royd's Mill	1793	1825	Platers and Refiners.
Willmore, Thos.	1796	1800	And in London.
Millachip, Wm.	1796		Ditto.
{ Blagden, Thos., Nursery St.	1796	1829	
{ Blagden, Hodgson and Co., White Rails	1822		
Leaders and Co., Surry St.	1797		
Lindley, Wm., 45, Lambert St.	1797		
Linley and Vickers, 6, Spring St.	1797		
{ Watson, John, 37, Furnace Hill	1797	1800	
{ Watson, J., and Son, Baker's Pool, 1800	1800		
Goodman, Gainsford and Fairbairn, Park.	1797		
Gainsford and Co., Eyre St.	1805		
{ Gainsford, Nicholson and Co., Eyre St.	1817	1834	
Gainsford, Fenton and Nicholson, Eyre St.	1828		
{ Green, Roberts, and Moseley, Mar- ket Pl.	1797	1811	Ditto.
{ Roberts, Moseley and Settle, Mar- ket Pl.	1809		
Hardy, Jos., Nursery Walk	1797		
Kitchen, Thos., 29, Howard St.	1797		
Kirkby, Joseph, 14, Lambert St.	1797		
Ashforth, Creswick, and Hartshorn, Silver St.	1800	1829	
Best, Thomas. 28, Eyre St.	1805	1808	Plated Knife Manufac- turer.
Hewitt, Henry, Furnival St.	1805	1811	
Hoyland, Wm., Hollis St.	1805	1811	Silver and Plated Table Knives.
Patten and Co., Norfolk St.	1805	1808	Plated Wire Drawers.
{ Poynton and Flower, 71, Scotland St.	1805	1811	Manufactures of Scissors and Plated Articles.
Poynton, T. and J., 71, Scotland St.	1809		

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
Rotherham, —, Sycamore St. . .	1805	1808	? C. Rotherham, of Birmingham and London.
Carnet, Edward, Bridgehouses . .	1817		
Rooke, Thomas, Sycamore St. . .	1817		
Vaughan, Thomas, Sycamore St. .	1817		
Wreaks, George, High St. . . .	1817		
Brown, Wm., Bailey St.	1817		
Clarke, Jos., North St.	1817		Britannic Metal Maker and Plater.
Dixon and Smith, Silver St. . . .	1817		Ditto.
Froggart, Henry, Eyre St. . . .	1817		Ditto.
Marshall and Co., Carver Lane . .	1817		Ditto.
Smith, George, Allum St.	1817		Ditto.
Dixon and Frith, Bailey St. . . .	1817?		Ditto.
Wollin, John, West Bar Green . .	1817?		
Younge, C. F., 54, High St. . . .	1817?		
{ Blackwell and Parkin, Hicks Lane	1817 }	1834	
{ Blackwell and Co., Top of Bridge-	1822 }		
houses			
Roberts, Clayton and Amory, 15,			
Solly St.	1817 }	1827	
Clayton, Thos., 15, Solly St. . . .	1822 }		
Needham, Chas., Wicker	1817 }	1852	Plated Measure Maker.
Needham, C., junr., Willey St. . .	1845 }		
Parkin, Wm., Broomhall Lane . .	1817	1829	
Smith, Tait, Houlst and Tait, Arundel St.	1817	1829	
{ Watson, J., Pass { Hartshead . .	1817 }	1845	And in London.
and Co. { Union St., 1828			
{ Watson and Son, Union St. . . .	1828 }	1827	
Bishop, Thos. { Rockingham St. .	1808 }		
{ Furnival St., 1825			
{ Hatfield, Aaron, Pepper Alley, Fargate	1808 }	1829	Registered mark: "A Fleur-de-lis," 1808.
{ Hatfield, A., and Son, Pepper Alley, Fargate	1828 }		
{ Green and Pickslay, High St. . .	1817 }	1829	
{ Pickslay, Appleby, and Bertram, High St.	1828 }		
Smith, Benjamin, 47, South St. . .	1817		
Smith, Josephus, (141, South St., 1848)	1834 }	1857	
Fentem, Webster and Danby, Howard St.	1818 }		
{ Webster, Danby and Co., Howard St.	1825 }	1827	And in London.
{ Briggs and Smith, Carver St. . . .	1822 }		
Briggs, Wm., Carver St.	1825 }	1834	
Cresswick, T. J. and N., Paternoster Row	1811		
		1857	Registered mark: "Sheffield Arms," 1811, 8 crossed arrows.

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
{ Furniss, Poles and Turner, Furnival St.	1822 }	1834	
{ Furniss, Poles and Co., Furnival St.	1825 }		
Rooke, Ben., and Sons, Pond Hill	1822	1827	
{ Howard, Battie and Hawkesworth, Charles St.	1822 }		
{ Howard and Hawkesworth, Orchard Lane, 1845	1834 }	1857	And in London.
{ Waterhouse and Co., near St. George's Church	1825 }		
{ Waterhouse, Hodgson and Co., Portobello	1828 }		
{ Waterhouse, Hatfield and Co., 203, Portobello Rd.	1836 }	1848	Registered mark: "A Phoenix," 1836.
{ Waterhouse, Hatfield and Sansom, 203, Portobello Rd.	1845 }		
Bradley, Thomas, 39, Osborne St. .	1828	1845	
Eyre, John and Co., Coalpit Lane	1828	1829	
Howlden, John, Solly St.	1828	1829	
Kirkbys, Gregory & Co., Carver St.	1828	1834	
Law, Atkin and Oxley, 100, Eyre St.	1828	1829	Also Manufacturers of gold and silver Dessert Knives and Forks.
Roberts, Sara, 20, Arundel St. . .	1828	1829	
{ Rodgers, Jos. and Sons, 6, Norfolk St.	1828 }	1852	Registered mark: "A Battleaxe.
{ Wilkinson, H. and Co., South St. Park	1828 }		
{ Wilkinson and Roberts, South St. Park	1834 }	1852	Registered mark: "Cross Keys," 1836.
{ Wilkinson and Co., 20, Norfolk St.	1848 }		
Armitage, Ben, West St.	1828	1834	Plated and Silver Measure man.
Southern, Jas., Canal Bridge . .	1828	1829	
Dixon and Sons, Cornish Place . .	1834	Present Day	
Harrison, { Norfolk Lane	1824	1852	After 1845 also Electroplaters and Gilders.
John and Co. { 116, Scotland St., 1845			
Hawkesworth, Eyre and Co., Nursery St.	1834	Present Day.	And in London.
Kitching, Walker and Curr, Burgess St.	1834		
Wilkinson and Roberts, South St.	1834		
{ Wilkinson, H. D. and Co., 9, Sycamore St.	1834 }		
{ Wilkinson, Henry Dawson, Shrewsbury Works, Park	1848 }	1848	
Hardy, Lowe and Co., 92, Carver Street	1841		

SHEFFIELD PLATE

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
Hutton, { 10, Surrey St.	1841	Present	After 1845 also Electro-platers.
W. and Son { 27, High St., 1848		Day.	
{ Roberts, John, Low St., Park	1841	1852	
{ Roberts and Hall, Low St., Park	1848	1852	
Shaw and Fisher, Howard Pl.	1841	1852	
Walker, Knowles and Co., 55, Burgess St.	1841	1857	And in London.
Wright, John, 100, Granville St., Park	1841		
{ Badger and Worrall, Shales Moor. fields, 1848	1845	1848	
{ Badger, Thos. and Co., 253, Moorfields, 1848	1848		
Freeman, Thos., 50, South St.	1845	1848	Also Plater on Steel.
{ Rhodes, T. and J., Howard St.	1845		
{ Rhodes, John, Mulberry St.	1848	1857	
{ Rhodes Bros., Mulberry St.	1857		
Shallcross, Wm., 66, Trinity St.	1845	1848	British Plate and Steel Plater.
Thompson { Eyre Lane	1845	1848	
and Brown { 4, Norfolk Lane, 1848			
Walker and Co., 11, Howard St.	1845	1852	Also Electro-platers and Gilders.
Wolstenholme, Jos., 31, Broad St., Park	1845	1857	And Electro-plater. Gilder.
Kay, J. R., 18, Meadow St.	1845		
Parker, Jas., Pepper Alley	1845		
Egginton, J. and W., 15, Rockingham St.	1845		Platers and Cutlers.
Rodgers, John, 24, Carver Lane	1845		Ditto.
Holdsworth, Wm., Old Park Mills	1845		Roller.
Younge, Robert, Clough Bank	1845	1857	Ditto.
Batt, Wm., Smithfield.	1848	1852	
Broadhead and Atkin, Britannia Works, Love St.	1848	1852	
Hawlesley and Co., Charlotte St.	1848	1852	
{ Padley, Parkin and Co., Hartshead	1848		
{ Padley, Parkin and Staniforth, Hartshead	1852	1852	
Allen, Geo., Duke St.	1852		
Davenport, Jos., Lee Croft	1852		
Deakin, Jos., 59, Spring St.	1852		And Britannia metal wares.
Drabble, Geo., and Co., 27, Carver St.	1852		
Eaton, Thos., and Co., 19, New Church St.	1852		
Fowler, F. J., 17, Copper St.	1852		
Greaves, Jos., 105, Arundel St.	1852		
Hilton, David, 67 $\frac{1}{2}$, Trinity St.	1852		
Mappin and Bros., Queen's Cutlery Works	1852	Present Day.	And in London.

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
Moss, Isaac, 45, High St. . . .	1852		
Otley, Thos., Lambert St. . . .	1852		
Oxley, John, and Co., 12, Charles St.	1852		
Ratcliffe, J. and C., 67, Arundel St.	1852		
Owen and Levick, Wellington St. .	1852		
Round, John, 6, Tudor St. . . .	1852		
Smith, John, 19, Carver St. . . .	1852		
{ Stacey and Henry, 50, South St. .	1852	1857	
{ Stacey, Henry and Horton, 50, South St.	1857		

Note

Many firms besides those specially marked (or their successors) continue to the present day; while others have so completely changed their names that the direct line of succession is impossible to trace. The Author would be grateful for any further information on the subject.

It should be noted that although the process of Electro-plating was discovered in 1840, the manufacture of Sheffield Plate must have continued for many years afterwards.

CHAPTER XXIV

BIRMINGHAM MAKERS

MATTHEW BOULTON

ONE of the most celebrated makers of Sheffield Plate was Matthew Boulton. He was born in Birmingham in 1728, and early in life displayed a certain amount of inventive genius; at the age of seventeen he made a new kind of inlaid steel buckle, and was interested in various improvements in the processes known at that day of working in metals. He was for a time in business with his father in Snow Hill, Birmingham, as a hardware manufacturer, but on the latter's death he inherited sufficient capital to enlarge his business, for which purpose he acquired the lease of some land at Soho, near Handsworth, and there started a factory for the making of silver and plated goods of various kinds. It had become his ambition to improve the metal manufacturers of his native town, which even then were elsewhere alluded to disparagingly as "Brummagen Wares," because of their often very poor quality. He opened agencies at home and abroad, and, with the aid of his partner, Fothergill, soon boasted a thriving business.

In 1767 James Watt visited Birmingham, and a strong friendship and mutual interests soon united him to Boulton, who greatly desired to obtain better power for working his machinery. Boulton and Watt became partners in the year 1774 with a view to perfecting steam power as applied to machinery, and a very extensive manufactory of steam-engines was established at the Soho (Fothergill and Boulton still remained partners in the old Soho metal and plated wares business, and continued a flourishing trade).

The partnership of Boulton and Fothergill lasted until the

latter's death, in 1782, but the plating business was prolonged for a time under the name of "Boulton and Scale." The Soho Mint was opened in 1788, when Boulton's improvements in the making of coins and medals came under the notice of the Government. From this Mint were issued the Penny and Twopenny pieces for 1797; the Halfpenny and Farthing pieces for 1799; and the Penny, Twopenny, and Farthing pieces for 1806-7; also the first Five Shilling Bank Tokens for 1804.

In 1794 both Boulton and Watt having a son of age, the young men were taken into partnership in the engineering business. The original partnership of Boulton and Watt expired in 1800, but Boulton maintained an active interest in the manufactory until his death in 1809.

From Boulton's earliest days it had been his desire to achieve distinction as a goldsmith, and it must be admitted that his plated wares at least have never been surpassed. He introduced the method of "Sheffield Plating" in his factory, where he produced many exquisite specimens. He went to London and sought designs among the antiques at the British Museum; he borrowed vases, etc., from the nobility of the day, and even obtained the loan of a piece from the Collection of the Queen. It is said that he employed Flaxman as a designer among other artists, and that he sent an agent abroad to report upon the foreign collections. Undoubtedly therefore he may claim to have raised the standard of the metal wares of his day.

It has been stated that no large pieces of solid silver were made in Birmingham; this is not the case, since the Soho factory alone sent out many fine specimens. On the first day that the Assay Office was opened in Birmingham, from the Soho were sent no less than 841 oz. to be assayed, one article weighing over 100 oz., and another nearly 200 oz. Much of the plate made in Birmingham did not, however, bear either the maker's mark or the Birmingham hall-mark, the purchaser having his goods "halled" in London with his own mark added; thus many pieces are not credited to their rightful producer. In the year 1768 Dr. Erasmus Darwin describes his visit to the Soho: "Here are toys and utensils of various kinds, in gold, copper, tortoiseshell, enamels, and many vitreous and metallic compositions, with

gilt, plated and inlaid works, all wrought up to the highest degree of perfection.

F. Bissett, of the Museum, Birmingham, in his "Magnificent and Grand National Directory," published in 1800, describes the "Soho Factory under the Annexed Firms":

Matthew Boulton and But-	
ton Co.	Buttons in General.
Matthew Boulton and Smith	Buttons and Latchets.
Matthew Boulton and Plate	
Co.	Silver and Plated Goods.
Matthew Boulton . . .	Mint for Government Coin.
Matthew Boulton . . .	Medals, Rolled Metals, etc.
Matthew Boulton . . .	Mercantile Trades in Birmingham.
Boulton, Watt and Sons .	Iron Foundry and Steam Engines.
J. Watt and Co.	Letter Copying Machines.

An allusion to the excellence of the plated goods made at the Soho Factory is to be found in Swinney's Birmingham Directory for 1774: "The plated work," he says, "has the appearance of solid silver, especially when compared with that of any other manufactory." Another tribute to the productions of Boulton's workshops appears in Stockdale's "Annales Caermoesenses," and refers to the Communion Plate of Flookburgh Chapel, in Cartmel, Lancashire. The reference is as follows:

	£	s.	d.
1791—Paid for a plated flagon and three pints with			
silver mouldings	4	16	0
A chalice cup and 1 pint with ditto	5	0	11
A salver with foot ditto	2	5	0
Engraving, etc., and box	0	6	6
A table cloth	0	12	0

"The above-mentioned plate, according to a letter I have in my possession, written by my grandfather to Messrs. Boulton and Watt (Watt! a name that never can be forgotten!) of Soho, Birmingham, was manufactured at their works there, then of world-wide celebrity. This communion plate, which was not of solid silver, but of plated metal with silver mouldings, after some seventy years

of continual use, had become very shabby, and even made the Sacrament wine taste more or less bitter if left therein but for a very short time."

It cannot but be admitted that seventy years of continual use is a very fair test of any specimen of plated ware; the price, moreover, seems reasonable enough compared with our modern standards of charges.

To complete this notice of Boulton and his work, allusion must certainly be made to his wonderful powers of organization and his continual personal supervision of his workpeople. He was a strict, though just, master: insisted on a full measure of work in return for an adequate wage: his disapproval of Guilds and Unions which affected the wages question has been elsewhere quoted; yet he permitted the formation of Clubs for mutual assistance among his large staff of employees. Below are given the Rules of the "Soho Sick Club"; they are of interest as proving the actual control exercised by Boulton over every branch of his immense business and every detail of its organization.

RULES FOR CONDUCTING THE INSURANCE SOCIETY BELONGING TO THE SOHO MANUFACTURE

Article 1. That every male person (except as provided by the 19th article) who is employed in the SOHO MANUFACTORY and SOHO FOUNDRY, and earns two shillings and sixpence per week shall be a member of the society, subject to the approbation of the elders.

2. Each member becoming a member of this society not to be intitled to receive pay unless from an accident met with in his employ until he has been in the club three months.

3. Each member shall pay to the treasure box agreeable to the table following, which is divided into eight parts, viz.—the member who is set down at two shillings and sixpence per week, shall pay one half-penny per week; five shillings, one penny; seven shillings and sixpence, three halfpence; ten shillings, twopence; twelve shillings and sixpence, twopence half-penny; fifteen shillings, three pence; seventeen shillings and sixpence, three-

pence half-penny; twenty shillings, fourpence. None shall exceed twenty shillings per week, and if any member sets himself down for more or less than he earns on an average, with an intent to defraud, he shall forfeit five shillings to the box; but the committee shall have power at any time to inspect his average earnings and to fix the weekly pay to the box.

4. That the affair of this society be managed by six elders and a committee; the elders to be appointed by Mr. Boulton for the purpose of inspecting the conduct of the acting committee, and determining in any material cases that may from time to time happen. The committee to consist of six members of this society, three new members to be chosen by the committee existing at the time of their election.

5. The name of every member shall be registered in a book in which their payments shall be regularly put down every Monday morning, and if any member omits paying his due more than two Mondays he shall forfeit to the box as much as is then due, viz.—if fourpence is due, he shall pay eightpence, and so on in the same proportion.

6. The committee shall visit the sick every day in their turns, and any one making default shall forfeit sixpence to the box unless he shall be prevented by a sufficient cause, in which case he shall, under a like penalty give notice to the next in turn, who shall visit or forfeit sixpence, and so on. The committee to be allowed half a day each week for visiting the sick.

7. If any member is sick, lame, or incapable of work, he shall give one clear day's notice to the committee, and immediately after such notice expires he shall be intitled to receive as follows during his illness (except as provided by the second article), viz.—if he pays in the box for two shillings and sixpence, he shall receive one shilling per week; if for five shillings, two shillings; if for seven shillings and sixpence, three shillings; if for ten shillings, four shillings; if for twelve shillings and sixpence, five shillings; if for fifteen shillings, six shillings; if for seventeen shillings and six pence, seven shillings; and if for twenty shillings, eight shillings. According to these rates shall every sick person be paid by the committee-man every Saturday, so long as the fund is upwards of one hundred pounds. In case of neglect of such payments by the

committee-man on each Saturday, he shall forfeit one shilling to the fund for every such neglect.

8. If on representation the stipulated allowance is found insufficient for the sick, the committee with the consent of the elders, shall allow an extra sum for such time as they may think proper.

9. If the committee can make it appear that any member feigns himself ill, he shall forfeit five shillings to the box, besides being publicly exposed; or if they can make it appear that his illness proceeds from any intemperance, such as drunkenness, debauchery, quarrelling or fighting, etc., he shall not be intitled to receive any pay from the society until ten days after he has given notice to the committee; or if any one be found drinking at an alehouse during the time he is on the box, he shall no longer be deemed worthy of pay; and members not declaring themselves off the box immediately on returning to work to be fined one shilling.

10. One of the committee in turn shall attend every Monday morning to receive the money, and shall be assisted by an accomptant appointed by the elders, who shall pay such accomptant for his trouble out of the funds of the society.

11. All money received every Monday morning shall be recorded in a book kept for that purpose, which book the committee shall at all times have free recourse to, to see that the accounts are fairly kept, and such money so received shall be immediately paid into the hands of a treasurer appointed by the elders.

12. When any member dies belonging to the society, every person in the club shall pay an extra week's club-money, if found necessary, and there shall be allowed for the funeral expenses of the deceased according to the following table, viz.: he who paid one halfpenny per week shall be allowed thirty shillings; one penny, forty shillings; three-halfpence, fifty shillings; twopence, sixty shillings; twopence-halfpenny, seventy shillings, threepence, eighty shillings; threepence-halfpenny, ninety shillings; and fourpence, one hundred shillings.

13. Any member who employs hands under him shall give an account of them to the committee, or on default shall forfeit one shilling to the box; further, if any fresh hands are employed, the committee knowing thereof, and neglecting to enter their names, shall forfeit one shilling to the box.

14. When any member goes away, or is not employed at or for his manufactory, it shall be optional for him to continue a member subject to all the laws and regulations of the society, provided he has been employed in the manufactory seven years, and has not been discharged by his employers for misconduct. The subscription of absent members to be paid monthly, and if at any time his arrears amount to more than three month's subscription, he shall no longer continue a member. The absent member must produce a satisfactory proof of his illness from a surgeon and minister or churchwarden of the parish, and that it does not proceed from any of the causes specified as exceptions in article number 9; the date of his relief to commence from the date of the above-named certificate.

15. Any new person who comes to work at or for this MANUFACTORY shall have one of these ARTICLES, for which he shall pay, if a man, one shilling; if a boy (from fourteen to eighteen years), he shall pay eightpence, and all under that age shall pay sixpence, which shall serve as entrance-money for becoming a member of this society.

16. As there are some who work at this MANUFACTORY who do not earn two shillings and sixpence per week, in case they are ill or in distress, the committee, with the approbation of the elders, may allow them a present out of the box for their relief.

17. Any member having been sick for six months, and received his allowance for that time, and shall still continue ill of some distemper of which he is not likely soon to recover, his weekly allowance shall be reduced as the committee and elders may think proper.

18. If any member continues ill for the space of three months or less, and it is found that he has been sent from an hospital with an incurable disease, then he shall be liable to be expelled this society upon paying to him the amount of all the money he has paid into the club.

19. Any person having attained the age of forty-five years, who shall come to work at the SOHO MANUFACTORY or SOHO FOUNDRY, shall have the option of becoming a member of this society; but in case he shall become a member he shall not under any circumstances be allowed out of the funds of this society more

than four times the amount of all the money he shall have paid in; and should the fund be reduced under one hundred pounds he shall only be allowed three times the amount of what he paid in; and if under fifty pounds, only twice the amount.

20. The committee to meet every Thursday in a room at SOHO (at such hours as they may agree upon) to deliberate on all accurencies, and to minute the same; and either of the committee making default in attending to forfeit sixpence to the fund, unless a sufficient cause can be given for his absence which shall be adjudged by the rest of the committee.

21. Each elder in turn shall attend the committee every Thursday meeting, during one quarter of the year, or in default to forfeit one shilling, unless any unavoidable incident happen to prevent him, and at the expiration of each quarter the elder who shall have attended such quarter of the year shall, within fourteen days of that time, balance the books, or in default thereof forfeit five shillings to the fund.

22. The committee for the time being shall be responsible for all arrears that shall become payable during their appointment.

23. As it has been a frequent custom for workpeople to ask money of the gentry going about the MANUFACTORY, it shall be deemed a forfeit of one shilling or more (as the committee may allot) for anyone found guilty of this misdemeanour. And as it has been too general a custom with the conductors of the gentry to receive money to themselves instead of putting it into the box, it shall be deemed a forfeit of five shillings for anyone found guilty.

24. As it is for the health, interest, and credit of the men as well as the masters, to keep this manufactory clean and decent, it shall be deemed a forfeit of one shilling to the box for anyone found guilty of any indecencies, or keeping dirty shops, which indecency, etc., shall be adjudged by the committee, and the forfeit made either more or less than one shilling, according to the greatness of the indecency, etc.

25. At the end of each year a statement of the funds of this society shall be made out by the secretary, and examined by the elders, and then posted up in the club rooms of SOHO and SOHO FOUNDRY for the inspection of the members.

26. If it should be found necessary to add new laws, or repeat old ones, the committee may, in majority, make such alteration as their prudence may think fit, observing that all these laws, and such as may from time to time be enacted, shall be subject to the inspection and control of Mr. BOULTON.

BIRMINGHAM MAKERS, ETC., 1762—1850

Chronologically Arranged

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
{ Boulton, Matthew, Soho . . .	{ 1762		Registered mark: "The Sun," 1784.
{ Boulton and Fothergill, Soho . .			
{ Boulton and Plate Co., Soho . .	{ 1770	1843	
{ Soho Plate Co., Soho	{ 1800		
Bakewell, Robert, 80, High St. . .	1770	1774	Plater and Toyman.
{ Barker, William, 44, Bartholomew Row	{ 1770	1843?	(Note. When one date only is given no further trace has been found.)
{ Barker, W. T.?, 42, Paradise St. .	{ 1841?		
Barnhurst, Robert, 103, Coleshill St.	1770	1793	
Bingham, Thomas, 54, Steelhouse Lane	1770	1781	Plater and Brass Nut-crack Maker.
Bullock, William, 68, Dale End . .	1770	1781	
Buckingham, J. and W., 8, Lichfield St.	1770		Platers and Key Makers.
Chantry, J., 56, Chapel Row . . .	1770	1775	French Plater.
Colmore, Samuel, 25, Digbeth . .	1770	1793	
Cooper, Thomas, 10, Paradise St. .	1770	1775	Plater and Horn Button Maker.
Cosnit, George, 4, Castle St. . . .	1770	1775	
Dudley, George, 18, Park St. . . .	1770	1793	
Evans, Edward, 13, Bell St.	1770	1774	
Farmer, James, 72, High St. . . .	1770		Plater and Toyman.
Greaves, J., 2, Queen St.	1770	1793	
Hesketh, Samuel, 83, High St. . .	1770	1784	
Hickman, R., 9, Mount Pleasant .	1770	1783	Plater and Plated Button Maker.
Holbach, J., Smallbrook St. . . .	1770	1775	
Horton, Mary, 20, Mount Pleasant	1770	1787	Plater and Cutler.
{ Jukes, Joseph, 20, Paradise Row .	{ 1770	1820	
{ Jukes and Sons, 20, Paradise Row	{ 1793		
{ Jukes, John, New St.	{ 1809		
Lane, Widow, 13, Coleshill St. .	1770		

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
{ May, Ben., 55, New St.	{ 1770	1793	Plater of Bits, Stirrups, and Coach Furniture. Plated Harness and Coach Furniture Makers; and in London.
{ May and Bolton	{ 1793		
{ Phillips, J., 17, Park St.	{ 1770		
{ Phillips, J., and Co., St. Paul's Sq.	{ 1787		
{ Phillips, J., and Son, St. Paul's Sq.	{ 1816	1825	
Piddock, J., Freeman St.	1770		
Platt, W. { 24 Moor St.	1770	1829	
{ Caroline St., 1816			
{ Porter, R., 37, Smallbrook St. . .	{ 1770		
{ Porter and Jesson, 37, Smallbrook St.	{ 1783	1793	
{ Porter, Richd., 37, Smallbrook St.	{ 1775		
Reynolds, John { 15, Edmund St.	1770	1849	
{ Price St., 1849?			
{ Roper, Jos., 16, Queen St.	{ 1770	1811	
{ Roper and Slater, 16, Queen St. .	{ 1783		
Roper, W., 7, King St.	1770	1796	And in London.
Robins, Wm., Bordesley.	1770	1775	
{ Ryland, Wm., 42, New St.	{ 1765?	1843	Registered mark: "An Eye," 1807.
{ Ryland, Wm. { Lower Temple St.	{ 1805		
{ Gt. Charles St., 1839			
Sargent, Thos., 54, Chapel Row .	1770	1775	Plater and Cutler.
Smart and Cottrell, 18, Walmer Lane	1770		
Smith, Samuel { 13, Colmore Row	1770	1829?	
{ Little Hampton St., 1816?			
Swift, Wm., 3, Cannon St.	1770		
Taylor, J. { 31, Thomas St.	1770	1823	
{ Summer Row, 1809?			
Topping, Daniel, 3, Gt. Charles St.	1770		
Wilson, R., 15, Tudor St.	1770		
Winfield, Ed., 113, Snow Hill . .	1770	1784	Plater and Engraver.
Wilmot, Chas., 49, Coleshill St. .	1770		Plated Buckle Maker.
Wright, James, 1, Freeman St. . .	1770	1781	
Yates, Thomas { 9, Bath St.	1770	1817	Plated Bridle, Bit and Stirrup Maker.
{ Suffolk St., 1809			
Grove, W. { 104, Dale End	1774	1825?	Plater and Grocer.
{ Lancaster St., 1818?			
{ Hunt, Basil, 48, Edmund St. . . .	{ 1775	1820 {	Roller and Plater of Metal.
{ Hunt, J., 48, Edmund St.	{ 1818		Saddletree Maker and Plater.
Mairty, Wm., 12, Bricklin Lane .	1775		Plater and Japanner.
Troughton, Samuel, 13, Edmund St.	1775		Plated Buckle Maker.
Alston, James, Church St.	1776		Plated Button Maker.
Collins, Wm. (? address)	1778		
Ashbury, Wm., 63, Edmund St. . .	1781	1793	
Bailey, Thos., New Hinckleys . .	1781		
{ Baker and Welsh, Gt. Charles St.	{ 1781		Makers of Plated Candlesticks.
{ Baker, S., 4, Lichfield St.	{ 1783	1812	

SHEFFIELD PLATE

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
Classon, Wm., Suffolk St. . . .	1781		
Collett, R., Brickiln Lane . . .	1781		
Dolphin, Geo., Gofly Green . . .	1781		
Finch, Edward, Cherry St. . . .	1781	1787	
Greenaway, J., Lichfield St. . .	1781		
Holden, J., Suffolk St.	1781	1850?	
Hornblower, Mount Pleasant . .	1781		
Humble, Samuel, 31, Edmund St.	1781	1784	
Lewin, Wm., Bartholomew Row .	1781	1793	
Masson, Digbeth	1781		
Malkin, S., Catherine St. . . .	1781	1793	Plated Buckle Maker.
Moore, S., Livery St.	1781	1790	
Parkes, Homer, Dale End	1781	1787	Registered mark: "A
Pearson and Young	1781	1787	Horseshoe," 1784.
Levington, Snow Hill	1781		
Ridden, John, 18, Moat Row . .	1781		
Sanders, J. { Church St.	1781	1843	
{ Gt. Charles St., 1829?			
Simcox, J., Bread St.	1781		
{ Skipp and Gee, Navigation St. . .	{ 1781	1793	
{ Skipp, George	{ 1777		
Sly, John, 13, Bread St.	1781	1784	
Smith, J. { Cross St.	1781	1842?	
{ Constitution Hill, 1839?			
{ Smith, George, Dudley St. . . .	{ 1781	1850?	
{ Smith, G., and Co., Bartholomew	{ 1847?		
{ St., 1816?	{ 1781	1793	
Thomas, Rowland, Hill St. . . .	1781	1820	
{ Sprigg, Wm., 11, Edmund St. . .	{ 1781		
{ Sprigg, Sam., 11, Edmund St. . .	{ 1816		
Thornton, J., Jennings Row . .	1781		
Wakefield, Thos., New Meeting St.	1781		
{ Wilmore, Thos., Suffolk St. . . .	{ 1781	1817 {	Plated Buckle Makers;
{ Wilmore and Hunt	{ 1793		and in London.
{ Wilmore Thos., Jnr., New St. . .	{ 1816		
Wilson, Thos., Navigation St. . .	1781		
{ Anderton, Son, and Calley, 31,	{ 1783	1820	Plated and Fancy Button
{ Wearman St.	{ 1818		Makers.
{ Calley, G., and Co., 31, Wearman St.	1783		Plated and Fancy Button
Ashford and Co., 63, Park St. . .			Makers.
Booth, Chas., Bartholomew Row .	1783	1793	Coach Furniture and Har-
Corp, Thomas and Cornelius, 52,			ness Plater.
Gt. Charles St.	1783	1784	Silverers and Plated
Dyus J., Dudley St.	1783	1784	Buckle Makers.
Gibbs and Bishop, Catherine St. .	1783		Plated and Steel Spur
			Maker.
			White Metal, Gilt and
			Plated Button Man'rs.

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
Griffiths and Hurst, Summer Row	1783	1787	Brass Founders and Platers.
Holland, J. and T., Lionel St. . .	1783	1793	Makers of Plated Candlesticks, Tea Urns, Tankards, Goblets, etc.
*Jee and Eginton, Whittall St. . .	1783	1784	<i>See Note.</i>
Leppington, J., St. Mark's Row . .	1783	1793	
Linwood, Matthew, Gt. Charles St.	1783	1827	Silversmith and Plated Buckle Maker.
Lord, Edward, Livery St. . . .	1783		Gilt and Plated Button Maker.
{ Lowe, Wm., Park St.	{ 1783	1847	Brass Founders and Coach Harness Platers.
{ Lowe and Sons.	{ 1793		
{ Lowe, Wm., Junr., Prospect Row.	{ 1816		
{ Merry, E., and Sons, Cherry St. .	{ 1783	1850	Toy Makers and Platers: also Plated Ornaments for the Army.
{ Merry, John, Cherry St.	{ 1793		
{ Merry, Parker, and Merry, Cherry St.	{ 1847		
Murray and Taylor, Moor St. . .	1783	1793	Gilt and Plated Button Makers.
Rock, Joseph, Wearman St. . .	1783	1793	Plated Bridle Bits, etc.
Sachwell, Hill St.	1783	1784	Gilt and Plated Button Maker.
Swaine and Taylor, 43, Wearman St.	1783	1784	Plated Buckle Makers.
{ Twigg, Charles, Edmund St., afterwards Snow Hill	{ 1783	1793	Platers and Rollers of Metal at the Steam Mill, Snow Hill.
{ Twigg and Co., Edmund St., afterwards Snow Hill	{ 1793		
{ Dale End	{ 1783		
Wright, John { Ashted Row, 1809 { 91, Hill St., 1835 .		1842	Plater and Lock Maker.
{ Adams, B. and T., Wearman St. .	{ 1784	1849	Factors and Platers. Silver Caster and Plater.
{ Adams, B., Ludgate Hill	{ 1825		
{ Dudley and Dick, Park St. . . .	{ 1784		
Freeth, Charles, Gt. Charles St. .	1784		
Gee and Amplett, Moor St. . . .	1784		
{ Gough, Jos., Edmund St.	{ 1784	1829	Platina Button Maker?
{ Gough, Jos., and Son, Constitution Hill	{ 1816		
{ Adams, Josiah. (No address given)	{ 1787		
Ashford, Charles. (No address given)	1787		
Baylis, J. (No address given) . .	1787		
{ Bingham and Co., 12, Newhall St.	{ 1787	1820 {	Gilt and Plated Button and Spoon Maker.
{ Bingham, J., 12, Newhall St. . .	{ 1805		

* *Note.* Manufacturers of Spoons strongly plated with silver on white Metal, silvered ditto, and in Britannic Metal; Coffin Furniture in best white metal and Iron Tin; Looking Glasses and Pictures in gilt metal and burnished gold Frames; bordering and ornaments for Rooms in stamped Paper or gilt Metal, also composition Ornaments for the enrichment of Mouldings, Friezes, etc.

SHEFFIELD PLATE

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
{ Bingley, W., Islington	{ 1787	1820 {	Plated Wire Drawer and Buckle Maker.
{ Bingley, W., and Son, Bishopsgate St., 1816	{ 1816		
{ Birkett and Co., Cherry St.	{ 1787	1793	Plated Buckle Makers.
{ Birkett, Henry	{ 1793		
{ Blakemore and Co., Lancaster St.	1787	1820	
{ Blakemore, Thos., Lancaster St.	1816		
Bricknall, Ben., Lancaster St.	1787		
{ Cheston and Aston, St. Paul's Sq.	{ 1787	1820 {	
{ Aston, S. and T., St. Paul's Sq.	{ 1818		Platers of Buckles and Watch Chains.
Clarkson, R., Hampton St.	1787	1820	
Clarkson, Wm. { Navigation St.	1787	1820?	Gilt and Plated Button Maker.
{ Suffolk St., 1818?			
Claybrook, J. (No address given)	1787	1793	
Cordell, Thos. (No address given)	1787		
Dallaway, J., New St.	1787	1793	Plater and Roller of Metals.
Dyus, Eliz. (? address)	1787		
Ellis, J. (? address)	1787		
Fidoe and Fallowes, Floodgate St.	1787	1795	
Goesbury, John, Grosvenor Row	1787	1793	Coach Harness Plater.
Green, Thos. (? address)	1787		
Hackett, Robert (? address)	1787		
Hancock, Wm., New Hinckleys	1787	1793	
Harrison, Painter, and Co. (? address)	1787		
Haynes, Richard, Snow Hill	1787	1793	
{ Jarrett and Antley, Suffolk St.	{ 1787	1823 {	Makers of Plated Bits, Stirrups, and Spurs.
{ Jarrett, Wm., Suffolk St.	{ 1816		
Johnson, Joseph, Aston St.	1787	1820	
Kenrick, Archd., St. Paul's Sq.	1787	1793	
Lilley and Bucknall (? address)	1787		
Luckcock, J. and J., Swallow St.	1787	1793	
{ Marshall and Mott, Newhall St.	{ 1787	1793	
{ Mott, Wm., Newhall St.	{ 1793		
Martin, Joseph (? address)	1787		
Mason, Isaac, Hill St.	1787	1793	
Massey, Robert (? address)	1787		
{ Mills and Patten, New St.	{ 1787	1823 {	
{ Mills and Westley, New St.	{ 1816		Platers and Rollers of Metal.
{ Patten, Wm., New St.	{ 1822		
{ Minshull, George, Edmund St.	1787	1820	
{ Minshull and Bayley, Edmund St.	1818		
Moor, Thos. { Sheep St.	1787	1823	French Plater.
{ Hospital St., 1816			
Morgan and Merry (? address)	1787		
{ Nichols and Co., Suffolk St.	{ 1787	1817	
{ Nichols, Primer, and Law	{ 1793		
{ Nichols, Francis	{ 1816		

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
Palmer, Edward, Prospect Row . . .	1787	1793	
Pynock, Mark (? address) . . .	1787		
{ Reading, John, Jamaica Row . . .	{ 1787	1830?	
{ Reading, J., and Son, Prospect Row	{ 1805		
Roe, Richard { Worcester St. . .	1787	1820	
{ New John St., 1816			
{ Ratherham, Charles, Gt. Charles St.	1787		
{ Ratherham and Son, Gt. Charles St.	1816	1850	And in London.
{ Ratherham, Edward, Gt. Charles St.	1847		
Ryle, John, Gt. Charles St. . . .	1787	1793	Or Royle.
{ Sanders and Co., Weaman Row . .	1787	1793	Platers of Buckles and Spurs.
{ Sanders, Anderton, and Jee, Weaman Row	1793		
{ (? address), 1787	1787	1842?	
Shaw, Thos. { Gt. Hampton Row, 1841?			
Sill and Belcher (? address) . . .	1787		
{ Slater, W., New Rd.	{ 1787	1842?	
{ Slater and Son, New Rd. . . .	{ 1805		
{ Slater, Jos.?, 18, Lench St. . . .	{ 1841?		
Stevens, R. (? address)	1787		
Terry and Richards (? address) . .	1787		
Torrishead and Green (? address) .	1787		
Weale, Wm., New Meeting St. . . .	1787	1793	
White, John { Lionel St., . . .	1787	1850?	Registered mark: "An Eagle's Head," 1811.
{ Warwick St., 1847?			
Wigley, Jonathan, New St.	1787	1793	Plater and Dealer in Rolled Metal.
Wyatt and Dixon (? address) . . .	1787		
Young Constantine, Loveday St. . .	1787	1793	
Joseph, Joseph (? address)	1787		Plated Stirrup and Bit Maker.
{ Jefcoate and Scott, St. Paul's Sq. .	{ 1787	1811	Gilt and Plated Button
{ Jefcoate, Joseph, St. Paul's Sq. .	{ 1809		Makers.
Marsh, John (? address)	1787		Plated Buckle Maker.
Whitworth, John (? address) . . .	1790		Plater and Dyesinker.
Baker, Daniel, Bread St.	1793		
{ Banister, W. and B., Lench St. . .	{ 1793	1842	Registered mark: "A Pheasant's Eye," 1808.
{ Banister, W. (Lancaster St., 1816)	{ 1807		Plater and Gilder and Mould Turner.
Blews, John, Navigation St. . . .	1793		
Bolton, T., Church St.	1793		
Bower, John, John St.	1793		Plated Buckle Maker.
Bracken and Dolphin, Livery St. .	1793		Plated Buckle Maker.
Bragg, J. and G., Newhall Hill . .	1793		
Britain, Wm., Freeman St.	1793		Gilt and Plated Button Maker.
Chester, Jas., Lichfield St. . . .	1793		Plated Buckle and Spoon Maker.

SHEFFIELD PLATE

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
Cotton, Sam., Lancaster St. . .	1793		
Currier, Thos., Queen St. . .	1793		Plated Buckle Maker.
Cauldwell and Inge Row, . .	1793		
Silvester { Hockley Rd. . .			Plated Buckle Maker.
{ Davis, Jas., Snow Hill . . .	{ 1793	1817	Plater and Toymaker.
{ Davis, Wm., Snow Hill . . .	{ 1816		
Deakins and Fairfax, Dale End .	1793		Cutlers, Surgeons' Instrument Makers, and Platers.
Dobbs, Thos., Livery St. . . .	1793		Roller and Dealer in Metals.
Shaw, Chas., Dale End	1793		
Claybrooke, J. G., Lawrence St. .	1793		Plater of Coach and Bridle Furniture.
Johnson and Morgan, Aston St. .	1793		
Eades, Wm., Cheapside	1793	1807	
Edden, Robt., Newhall St. . . .	1793		
Ellis and Hammond, Moat Rd. . .	1793		
Elwell, Abram, Edmund St. . . .	1793		Plated Buckle Maker.
Elwell, Jas., Livery St.	1793		
Fellowes, Richd., Hall St. . . .	1793		
Ford and Peacock, Navigation Street	1793		
Frazier, Daniel, Peck Lane . . .	1793		Plated Buckle Maker.
Gibbins, Joseph, 8, Prospect Row	1793		Gilt and Plated Button Maker.
Greenway, Michael, Lichfield St. .	1793		Plated Button Maker.
Griffin, Thos., Paradise St. . . .	1793	1811	Plated Buckle Maker.
Harden, Jos., Bartholomew St. . .	1793		
Hoddinott, Wm., Upper End of Edmund St.	1793		Metal Plater and Seller.
Javens, Henry, Hockley Rd. . . .	1793		
Lucas, Sebastian, Masshouse Lane	1793	1817	Maker of Plated Cabinet Furniture and French Plater.
{ Magenis, J. and T. { Hampton St.	1793	1833	
{ Magenis, J. { Birchall St., 1829			
Mainwaring, Wm., Temple Row . .	1793		Plated Buckle Maker.
Moor, J., Sheep St.	1793		
Moor, Samuel, Birmingham Heath	1793		Ditto.
Moore and Lewis, Snow Hill . . .	1793		
Moore, John, Edgbaston St. . . .	1793		Stamper, Glass Cutter, and Plater.
Motteram, Chas., Bull St.	1793	1823	
Parker and Langston, Price St. . .	1793		
{ Partridge and Jones, Price St. . .	{ 1793	1825	Plated Wire Drawers.
{ Partridge, W., Price St.	{ 1805		
Patrick, Wm. { St. Paul's Sq. . . .	1793		
Eaves { Legge St., 1821			

BIRMINGHAM MAKERS

307

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
{ Pearson, Richard, Price St. Pearson, Richard, and Son, Price St. Porter, J., and Co., Suffolk St.	{ 1793 1809 1793	1823	Registered mark: "A. C. reversed," 1811. Gilt and Plated Button Makers.
Rabone, Richard, Gt. Charles St. Randall, J. and T., Newhall St.	1793 1793		Plated Buckle Maker. Gilt and Plated Buckle Maker.
Reynolds, Thos., Newton St. Sargent and Stanton, Russell St.	1793 1793		Plated Buckle Maker. Tutanegand Metal Buckle Makers and Platers.
Selkirk, Wm., Aston Rd. Seward, Robert, Milk St. Short and Jarvis, Price St. Smith and Co., New St.	1793 1793 1793 1793	1823	Plated Buckle Maker. Ditto.
{ Smith, Jealous, Hall St. Smith, Jabez, Hall St. Smith and Son { Hall St. Bread St., 1847	{ 1793 1818 1822	1850	Coach Harness Platers.
Solomon and Co., Dudley St. Warwick, Wm., Lionel St. Webb, Thos., Constitution Hill Wickins, Robert, Loveday St. Wynn, Cornelius, Constitution Hill Yates, J., and Co., Bradford St.	1793 1793 1793 1793 1793 1793		Plated Buckle Maker. Ditto. Ditto. Ditto. Brass Founders and Platers of Coach Harness.
Hand, John (? address) { Taylor, Joseph, Newhall St. { Taylor and Perry, Newhall St. { Hancock, Charles, New St. { Hancock and Keeley, New St. { Keeley, S., New St. Allen, W., Crescent	1794 { 1794 1815 1798? 1828 1831 1805	1816	Plater and Toy Maker.
Aston, Jos., Bradford St., Deritend Bardell, Edward, Prospect Row { Bottely and Lilly, St. Paul's Sq. { Lilly, John, St. Paul's Sq. { Lilly, John, and Son, St. Paul's Sq. { Lilly, John, Junior, St. Paul's Sq. Cran, J., Bradford St., Deritend	1805 1805 1805 1816 1825 1835 1805	1817 1825 1843 1807	Plated Spoon, Tea Tongs and Caddie Manufacturer. Plater and Gilder. Coach Harness Plater.
{ Cracknell and Evans, Staniforth St. Cracknell, John, Staniforth St. Dyer, Wm. { Parade Edmund St., 1816 Palmer, Joseph { Snow Hill Inge St., 1825	{ 1805 1816 1805 1805	1823 1823	Registered mark: "A Fox's Head," 1814.

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
Edwards, J. { Gt. Hampton St. . . Park St., 1829	1805	1839	
Evetts, Thos., Inckleys	1805	1807	Gilt and Plated Button Maker.
Hendren, Felix, Gt. Charles St. .	1805	1807	
Hickman, Charles, Hill St. . . .	1805	1807	
{ Hill and Co., Hill St.	1805 }	1823	Registered mark: "A Cannon," 1716.
{ Hill, Daniel, Hill St.	1809 }		
Jennins, Charles, Deritend	1805	1807	Gilt and Plated Button Maker.
Johnson, John { Newtown Row . . Aston Rd., 1818 .	1805	1821	
Jones, John, Bromsgrove St. . . .	1805	1807	Plated Inkstand Maker.
{ Kettle and Son, Suffolk St. . . .	1805	1820	Gilt and Plated Button Makers.
{ Kettle, Wm., Suffolk St.	1816		
Linwood J. { Newhall St.	1805	1833	Registered mark: "A Tree," 1807.
Masefield, W., Snow Hill	1805	1807	Plater and Tin Worker.
{ Mason, J., and Son, Newtown Row	1805 }	1817 }	Gilt and Plated Button Makers.
{ Mason, J., Newtown Row	1816 }		
Moon, Thos., Livery St.	1805	1807	Gilt and Plated Button Makers.
{ Nevill and Co., Gt. Charles St. . .	1805 }	1820	Platers and Founders.
{ Nevill and Lowe, Gt. Charles St. .	1816 }		
{ Partridge, Wm., Charlotte St. . . .	1805 }	1817	
{ Partridge, Eliz., and Sons, Charlotte St.	1816 }		
Cheston, Thos., Jamaica Row . . .	1805	1825	Registered mark: "A Tulip," 1809.
Pearce, W., and Co., Exeter Row .	1805	1820	Plated Button Makers.
Rayner, Richd., Edmund St. . . .	1805	1807	Gilt and Plated Button
Roome, Wm., Bartholomew Row . .	1805	1820	and Trinket Maker.
Ryland, John, Paradise St.	1805	1811	
Ryland, Jas., 29, New St.	1805	1811	
{ Sanders, Mark, Jennins Row	1805	1820	
{ Sanders and Deakin, Jennins Row	1818		
Sims, Edward, Prospect Row	1805	1807	
{ Simpson, John, Paradise St. . . .	1805 }	1823	
{ Simpson, John, and Co., Paradise St.	1816 }		
Small, Thos., Suffolk St.	1805	1807	Plated Button Maker.
Smith, John, Russell St.	1805	1807	
{ Swingler, Thos., Price St.	1805 }	1839	Plated Wire Drawers.
{ Swingler, T. and W., Stanforth St., 1835	1839 }		
Tompkins, W., Moseley St.	1805	1807	Plated Inkstand Maker.
{ Turner and Twiss, 20, Gt. Charles St.	1805 }	1850	(Twiss, Thos., 1839.)
{ Twiss, T. and J., 20, Gt. Charles St.	1816 }		
Twist, Jas., Newhall St.	1805	1817	

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
Walker and Bennett, Mount St. . .	1805	1807	Plater and Refiner. Plated Button Maker. Silversmith and Plater (Sir Edward Thomason, 1832.)
William Abel, Gt. Charles St. . .	1805	1807	
Wilson Pope, St. Mary's Row . .	1805	1807	
Thomason, Ed., Church St. . .	1806	1835	
{ Allport, Ed., Cannon St. and Gt. Brook St. }	1809	1850	Plater and Jeweller.
{ Allport, Jas., 12, Wearman Row, 1835 }			
Anstey, Sam., 25, Gt. Charles St. .	1809	1811	
Avern, Thos., Dudley St. . . .	1809	1811	
Baker, Jas., 15, Steelhouse Lane .	1809	1811	Silver Platers and Cruet Frame Makers.
Barber, Thos., Cock St.	1809	1811	
Brewin, Thos., Moor St.	1809	1811	
{ Challoner, Ed., Gt. Hampton St. . }	{ 1809	{ 1843	
{ Challoner, John, Snow Hill, 1843 }	{ 1835		
Evans, Stephen, Pimley's Ct., Queen St.	1809	1811	Gilt Toymaker and Plater.
Evans, Jas., Edgbaston St. . . .	1809	1842	
{ Hardy, Joseph, Wearman Row . . }	{ 1809	{ 1833	
{ Hardy, J., and Co., Wearman Row	{ 1816	{ 1811	
Horton, Robert, Moor St.	1809	1821	Registered mark: "A Triangle," 1807.
Horton, John, Foredrough St. . .	1809		
Horton, David, Paradise St. . . .	1809		
{ Horton and Whitehouse, Paradise St. }	{ 1816	{ 1817	
Hutton, Wm., Cannon St.	1807	1842	Gilt, Plated, and Steel Button Maker.
Hutton, Wm., and Son, Fleet St., Gt. Charles St., 1841	1823		
Iliffe, Charles, Suffolk St. . . .	1809	1811	
Keartland and Parker, 12, Naviga- tion St.	1809	1811	
Merchant and Bingley, Thorpe Street	1809	1811	Plater and Spoon Maker. Registered mark: "A Chequer," 1810.
Nicholds, J., Foredrough St. . .	1809	1823	
Pimley, Sam., Upper Priory. . .	1809	1835	
Porter, Thos. { Bristol Lane, Steelhouse Lane, 1818 }	1809	1821	
{ Richards, John, Church St. . . . }	{ 1809	{ 1850	Gilt, Plated, and Pearl Button and Spectacle Maker.
{ Richards, John, and Son, Mary St., 1835 }	{ 1835	{ 1820	
Room, R., Lombard St.	1809		
Smith, Wm. { Nineveh	{ 1809	{ 1830	
{ Gt. Hampton St., 1820 }			Registered mark: "A Semiquaver," 1812.

SHEFFIELD PLATE

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
{ Spooner, Wm., 12, Beak St., Suffolk St.	1809	1850	
{ Spooner and Co., New Market St.	1816		
{ Spooner, Clowes and Co., New Market St.	1822		
{ Spooner, Painter and Co., New Market St.	1835		
Turley, Sam, Snow Hill	1809	1823	Registered mark: "A Coach Wheel," 1816.
Walker, Wm., Belmont Row . . .	1807	1817	Registered mark: "An Acorn," 1807.
{ Waterhouse, Thos., Hill St. . . .	1809	1842	
{ Waterhouse and Ryland, Hill St. .	1810		
{ Waterhouse and Lightfoot, Hill St.	1816		
{ Waterhouse and Son, Hill St. . . .	1835		
{ Whitworth, Jas. { Upper Priory . .	1809	1825 {	Plater and Inkstand Maker.
{ Aston Row	1809	1821	
{ Wright and Burn, 38, Hill St. . . .	1816		
{ Burn, Charles, 38, Hill St.	1814	1843	Registered mark: "A Table Fork," 1814.
{ Jorden, Thos. { Bordesley St. . . .	1814	1820	Gilt and Plated Button Maker.
{ (or Jordan) { Whittal St. 1825	1816		
Beach, J., Summer Lane	1816	1820	Ditto.
Cutler, Henry, 28, New Inckleys .	1816	1820	Ditto.
Dunbar, Henry, 24, St. Paul's Sq.	1816	1820	Ditto.
Good, Jas., Lench St.	1816	1820	Ditto.
Hamson, Cook, and Co., 15, Cannon St.	1816	1820	Ditto.
Harris, Wm., 8, Newhall St. . . .	1816	1817	Ditto.
Hill, Wm., 27, Suffolk St.	1816	1820	Ditto.
Holt, Ben., Pritchett St.	1816	1817	Ditto.
Hunter, Thos., Foredrough St. . .	1816	1820	Ditto.
Kempson, P., and Son, Little Charles St.	1816	1820	Gilt, Plated, and Metal Button Makers.
Lee and Coney, 44, Edmund St. . .	1816	1820	Ditto.
Mann, Jos., 20, Gt. Charles St. . .	1816	1820	Ditto.
Moon, Jos., Mount St.	1816	1820	Ditto.
Nicklin, John, 22, Gt. Charles St.	1816	1820	Ditto.
Pickering, J., and Co., St. Paul's Sq.	1816	1820	Ditto.
{ Watton, Sam., St. Paul's Sq. . . .	1816	1820 {	Gilt and Plated Button Manufacturer.
{ Watton, Jane, St. Paul's Sq. . . .	1818		
Willis, Phipson, and Co., 9, Colmore Row	1816	1820	Ditto.
Allgood, John, Essex St.	1816	1830	Registered mark: "A Plough."
{ Barlow and Son, Cannon St. . . .	1816	1850	
{ Barlow, John, Little Hampton St.	1835		
{ Blocksidge, { Edmund St.	1816	1823	
{ Jesse { Northwood St., 1818	1816	1817	
{ Brooke and Harris, Aston St. . . .	1816	1850	
{ Brown and Hardman, Paradise St.	1816	1821	
{ Brown, Jas., Paradise Street. . . .	1821		

BIRMINGHAM MAKERS

311

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
Bryan, Wm., 87, Moor St. . . .	1816	1817	
Burgess, Thos., Dale End . . .	1816	1821	
Butts, Thos., Cross St., Hill St. .	1816	1817	
Chester, Thos., 24, St. Paul's Sq. .	1816	1817	
Clarke, Jas., 4, Temple St. . . .	1816	1820	
Cooke, Jos., Cherry St. . . .	1816	1817	
{ Cope and Cutler, Edmund St. . .	{ 1816	1850	Registered mark: "A Watch Key," 1817.
{ Cope and Son, Bartholomew Row .	{ 1825		
{ Cope and Pinches, 8, Exeter Row .	{ 1839	1841	
{ Cope, David, 8, Exeter Row . . .	{ 1829		
Cutler, Ben. { Snow Hill	1816	1821	
{ Price St., 1821 . . .			
Curson, Wm., 3, New Thomas St. .	1816	1825	
Danby, Sam. { 3, Gough St. . . .	1816	1830	
{ Gough Lane, 1825 . . .			
Dixon, Matthew, 107, Snow Hill .	1816	1850	
Dowler, Thomas, Gt. Charles St. .	1816	1823	
Eades, Richard, 22, Paradise St. .	1816	1833	
Edmunds, Jos., Little Charles St. .	1816	1817	
Ellis, David, Duke St.	1816	1825	
{ Evans, Sam., Church St.	{ 1816	1850	Registered mark: "A Tea-spoon," 1816.
{ Evans, S., and Son, Lionel St., St. Paul's, 1839	{ 1829		
{ Field and Hall, Mary Ann St. . .	{ 1816		
{ Field, Wm., Mary Anne St. . . .	{ 1820	1823	
{ Field, Wm., and Co., 10, Snow Hill	{ 1823		
Gilbert, John { Legge St.	1812	1849	Fancy Plater. Registered mark: "A Cinaber," 1812.
{ 8, Bath Row, 1841 . . .			
Godso and Co., Ann St.	1816	1821	
Hadley, Ben, Cottage Lane	1816	1821	
Harwood, Thos. { Bread St.	1816	1850	
{ Mott St., 1839.			
Hickman, Jos., Suffolk St.	1816	1817	
Hinks, John, Gt. Charles St. . . .	1816	1817	
Hipwood, Wm., 4, Prospect Row . .	1816	1823	Registered mark: "Cross Eggs."
Hutton and Houghton, 30, Paradise St.	1816	1820	
James and Gibbs, 6, Newhall St. .	1816	1820	
Kelk, Charles, Freeman St.	1816	1817	
Lander, Jas., Bartholomew Sq. . .	1816	1820	
{ Lloyd and Cooper, Bromsgrove St. .	{ 1816	1820	
{ Cooper, Jos., Bromsgrove St. . . .	{ 1818		
Magenis, Thos., Lionel St.	1816	1820	
Markland and Hipkiss, Whittall St.	1816	1817	
Morgan, Geo., Lionel St.	1816	1833	
Moore, John, Gt. Charles St. . . .	1816	1820	
Nixon, Thos., Upper Priory	1816	1823	
Overton, Wm., Coleshill St. . . .	1816	1823	And in London.
{ Parker and Fereday, Slaney St. . .	1816		
{ Parker, J., Slaney St.	1818	1820	

SHEFFIELD PLATE

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
Price, Thos., 27, Cannon St. . .	1816	1817	
Price, Wm., Moor St.	1816	1820	
Radclyffe, John, Lower Temple St.	1816	1823	
Reid and Sons, 5, Hall St. . . .	1816	1820	
Renshaw, Wm., Cherry St. . . .	1816	1839	
Richards, Wm., 23, Paradise St. .	1816	1830	
{ Robotham, J. and T., Hall St. . .	{ 1816	1850	
{ Robotham, T., Hall Street . . .	{ 1835		
Robinson and Allport, Loveday St.	1816	1830	
Rogers, J. { Gt. Charles St. . . .	1816	1835	
{ Coleshill St., 1835			
Shaw, Wm., 23, Edmund St. . . .	1816	1817	
Sheppard and Corn, Exeter Row .	1816	1820	Registered mark: "A
Sherwood, John { Upper Priory . .	1816	1850	Buckle," 1819.
{ Lichfield St., 1833			
{ Simpson and Ellis, Livery St. . .	{ 1816	1850	
{ Simpson, Thos., Livery St. . . .	{ 1825		
Smith, Jas. { 44, Navigation St. . . .	1816	1850	
{ Snow Hill, 1839			
{ Warstone Lane, 1847			
Stevens, Jeremiah, Snow Hill . .	1816	1820	
Scudamore, Jeremiah, Spiceal St. .	1816		
Swain and Davies, Whittall St. . .	1816	1821	
Thomas, Stephen, Lancaster St. . .	1816	1817	
Thropp and Co., Hurst St.	1816	1821	
{ Tonks, J., and Co., Bristol St. . .	{ 1816	1830	Registered mark: "A
{ Tonks, S., Bristol St.	{ 1829		Square."
Tyndall, Jos., Moseley St.	1816	1817	Registered mark: "A
Vale, Jos., 4, Edmund St.	1816	1817	Globe."
{ White and Allgood, 9, Gt. Charles St.	1816		
{ White and Co., 9, Gt. Charles St. .	1821	1821	
Whitmore, John, Grosvenor Row .	1816	1817	
Wright, Chris., Bromsgrove St. . .	1816	1833	
Wilkes and Co., 16, St. Paul's Sq.	1816	1820	
Barnes, Geo., Fox St.	1816	1825	French Plater.
Clare, Wm. { Bromsgrove St. . . .	1816	1825	Ditto.
{ Dale End, 1821			
{ Law, John, Navigation Street . . .	{ 1816	1850	Ditto.
{ Law, George, Upper Tower St., 1833	{ 1850		Ditto.
{ Poller, Rich., Duddleston St. . . .	1816	1843	Ditto.
{ Poller, Rich., Junior, Steelhouse			
{ Lane, 1825	1818		
Ward, Solomon, Nova Scotia St. .	1818	1830	Ditto.
Botteley and Richards, James St. .	1818	1823	
Eggenton and Co., Bread St. . . .	1816	1817	
Hughes, Ed., Paradise St.	1816	1830	
Painter, John, Exeter Row	1816	1825	
{ Phillips and Perry, St. Mary's Row	{ 1816		
{ Perry, John, St. Mary's Row . . .	{ 1818	1825	

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
{ Wells, Jos., Gt. Charles St. . . .	{ 1816	1823	
{ Wells, I. T., Gt. Charles St. . . .	{ 1822		
Tumer, John (? address). . . .	1817	?	Plater and Button Maker.
Allgood, W., Horsefair	1818	1820	Gilt and Plated Button Maker.
Baldwin, A. and W., Gt. Hampton St.	1818	1820	Ditto.
Bartleet, Thos., Gt. Charles St. . .	1818	1820	Ditto.
Beardmore, J. H., Gt. Brooke St. .	1818	1820	Ditto.
Earl and Co., Bromsgrove St. . .	1818	1820	Ditto.
Hammond, Bonham, Gt. Hampton St.	1818	1820	Ditto.
Hardman, John, Paradise St. . .	1818	1820	Ditto.
Harris, B. H., Northwood St. . .	1818	1820	Ditto.
Hawkins, Wm. { Edmund St. . .	1818	1850	Ditto.
{ William St. North, 1839			
Latchford, Jos., Edmund St. . .	1818	1820	Ditto.
Perry, Chas., Congreve St. . . .	1818	1825	
Simister, Hesketh and Co., Water St.	1818	1820	Ditto.
Steadman, R., and Co., Edmund St.	1818	1820	Ditto.
Welsh, Jos., Islington	1818	1820	Ditto.
Bee, John, Mount St.	1818	1820	
Bower, Jos. { Gt. Charles St. . .	1818	1843	
{ Snow Hill, 1843			
Bramich, John, Bath Tow	1818	1820	
Brooke, Lot., 27, Cannon St. . .	1818	1825	Coach Harness Plater.
Clarke, J. S. and A. G., Moor St. .	1818	1825	
Collins, Jas., 4, Cock St. . . .	1818	1820	
Cox, W. and T., Bromsgrove St. .	1818	1823	
Crowley, Wm. { Ludgate Hill . .	1818	1823	And in London.
{ Water St., 1821			
Fox, J., and Co., Lionel St. . .	1818	1825	
Greensil, Wm., Lower Temple St.	1818	1820	
Groves, John, Bread St.	1818	1820	
{ Lane, Wm., 14, Bell St.	{ 1818	1825	Registered mark: "A Cornet," 1818.
{ Lane, Joyce, 14, Bell St.	{ 1825		
Markland, Wm., Sand St. . . .	1818	1825	
Mason, Rich., Lionel St. . . .	1818	1820	
Poole and Jenns, 91, Snow Hill .	1818	1820	
Powell, Chas., Colmore St. . . .	1818	1820	
{ Rogers, J., Fleet St.	{ 1818	1825	Registered mark: "A Hand and Trumpet," 1819.
{ Rogers, J., and Co., Fleet St. . .	{ 1821		
Skip, John { Hill St.	1816	1830	
{ Price St., 1818			
Steel, Wm., Cherry St.	1818	1823	
Timmins, Jas., Mount St. . . .	1818	1820	
Tongue, Wm., 22, High St. . . .	1818	1821	
Tongue, Wm., Livery St. . . .	1818	1820	

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
Vale and Hardy, Charlotte St. . .	1818	1823	
Westbrook, Jos., 3, Newtown Row	1818	1823	
Duncalf, Wm., Coleshill St. . .	1818	1820	French Plater.
Betts and Son, St. Paul's Sq. . .	1818	1823	Makers of Plated Metal.
George, Jas. { Water St.	1818	1825	Ditto.
{ Summer Lane, 1825			
Taylor, Jas., Summer Lane . . .	1818	1823	Ditto.
Avery, Daniel, Upper Priory . . .	1821		Plated Inkstand Maker.
Bakewell, R., Loveday St. . . .	1821		Plated and Brass Collars.
Benton, John, Livery St. . . .	1821	1823	Plated and Brass Tele- scopes, etc.
Britain, Richard, Digbeth . . .	1821		Plated Dog Collars.
Bullock, Thos., Brittle St. . . .	1821	1823	Plated Steel Bead and Ball Maker.
Burgess, Wm., Brearley St. . . .	1821	1823	Coach Harness Plater.
Butts, Jas., Hill St.	1821		Ditto.
Deeley, Wm., Gt. Hampton St. . .	1821	1850	
Doughty, T. and B., Lench St. . .	1821		Gilt and Plated Button Makers.
Downes, Jos., Pinfold St. . . .	1821		Gilt, Plated, and Steel Purse Makers.
Davis and Fitter, Coleshill St. . .	1821		French Platers.
Fanton, Thos., Staniforth St. . .	1821		
Finnemore and Potts, Edmund St.	1821	1830	
{ Hall and Rostell, 90, Hill St. . .	{ 1821	1830	
{ Rostell, Wm., 90, Hill St. . . .	{ 1825		
Hanson, Matthias, New Meeting St.	1821	1823	Registered mark: "A Leg."
Harris, Jas. { Wearman St. . . .	1821	1839	
{ Gt. Charles St., 1835			
{ Prinsep St.	1821	1850	
Harris, Jos. { Bartholomew St., 1847			
Heeley, Wm., Moor St.	1821		Plater and Victualler.
Hewlett, Jas., Gt. Charles St. . .	1821	1849	
{ Hooper, T. and W., Duke St. and Aston Rd.	{ 1821	1850	
{ Hooper, W., Bartholomew St. . .	{ 1835		
Jenns, George, Aston Rd. . . .	1821	1823	
Law, Richard, Hill St.	1821		
{ Lowe, Wm., Castle St.	{ 1821	1850	
{ Lowe, Peter, Castle St.	{ 1847		
Lilley, Jos., Foredrough St. . . .	1821	1823	Registered mark: "Aqua- rius."
Lowe, Thos. { Gt. Charles St. . .	1821	1839	
{ Church St., 1839			
Moore, Fred., William St. . . .	1821	1823	Fancy Plater.
Parker, John { Summer Row . . .	1821	1850	
{ High St., 1830			
Piercy, Bower, and Piercy, Snow Hill	1821		
Poller, Ben., Coleshill St. . . .	1821		

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
Prime, John, Navigation St. . . .	1821	1823	Plated Spur Manufacturers.
{ Rock and Cooper, Moland St. . . .	{ 1821	{ 1833	
{ Cooper, John, Moland St. . . .	{ 1823	{	
{ Cooper, John, and Son, Moland St.	{ 1833	{	
Shepherd, Jos., Vauxhall St. . . .	1821		
Sheppard, John { Suffolk St. . . .	1821	1835	
{ Ryland Rd., 1833			
{ Small, Thos., Paradise St. . . .	{ 1821	{ 1825	Plater and Victualler.
{ Small and Hipkiss, Paradise St. .	{ 1823		
Westwood, Thos., Lichfield St. . .	1821		
Wittom, P. H. { Newhall St. . . .	1821	1815	
(or Witton) { 5, Ann St., 1825			
Hardy, Jas. { Summer Hill Terrace	1821	1839	
{ Sandpits, 1835			
Bendall, Jas., 20, Steelhouse Lane	1823	1825	
Harrison, Geo., Summer Hill Ter- race	1823	1825	
Hill, John { 30, Loveday St. . . .	1823	1850	
{ Steelhouse Lane, 1833			
Jones, Charles, New St.	1823	1825	
Leadbeater, Thos., Barford St. . .	1823	1825	
Lees, Geo., 45, Park St.	1823	1825	
Linghen, Thos., 38, Newhall St. .	1823	1833	
{ 92-93, Hill St. . . .	1823	1841	
Lowe, Rich. { 231, Newtown Row, 1825			
Phipson, J. W. { 126, New St. . . .	1823	1833	
{ Paradise St., 1833			
Butcher, Thos., Pritchatt St. . . .	1823	1825	
Hughes, Joseph, Back of 15, Ann St.	1823	1833	
Cook, Ben., 2, Summer St.	1823	1833	
Cox, Thos., 2, Dean St.	1823	1833	
Cutler, Mrs., 15, Bell St.	1823	1833	
Davis, John, 6, Lichfield St. . . .	1823	1830	
{ Devey, John, 22, Summer St. . . .	{ 1823	{ 1833	
{ Devey, S., Loveday St.	{ 1833		
Dutson, John, 139, Suffolk St. . .	1823	1830	
Gregory, S. and J., Hurst St. . . .	1823	1830	
Pitt, Jos., Aston Rd.	1823	1830	
Powell, Jas., 86, Coleshill St. . .	1823	1830	
{ Richards, R., 78, Navigation St. .	{ 1823	{ 1849	
{ Richards, W., 78, Navigation St. .	{ 1849		
Screeeton, Wm., 119, Pritchett St. .	1823	1849	
{ 26, Coleshill St.	1823	1833	
Smallwood, John { Navigation St., 1833			
{ Smith and Tart, 56, Constitution Hill	1823	1850	
{ Smith, John, 56, Constitution Hill	1841		

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
Smith and Barlow, 30, Water St. . .	1823	1830	
Swan, Sam, 37, Swallow St. . . .	1823	1825	
{ Swain, Jos., Livery St.	1823		
{ Swain, J., and Son, Summer Lane, 1847	1847	1850	
Tart, Wm., Deritend	1823	1825	
Turner, Jos. { Beak St.	1823	1839	
{ Camden St., 1839			
Wilson, R., Summer Hill Terrace	1823	1825	
Wood, Ben., 3, Caroline St. . . .	1823	1825	
Worton, S., 106, Snow Hill	1823	1830	Registered mark: "Scissors."
Pinches, Wm., 45, Peck Lane . . .	1823	1825	Registered mark: "An Egg."
Turton, John, 40, Church St. . . .	1823	1833	
Whall, H. G. (? address)	1825	1833	
Adams, Thos., Lionel St.	1829		
Atkins, Thos., Moor St.	1829		
{ Barker and Creed { 87, Caroline St.	1829		
{ Creed and Son { Carver St., 1830	1839	1850	
{ Creed, Jos.	1842		
Baker, Mary, Lionel St.	1829		
Barton, John, Exeter Row	1829		
Barton, John, Frederick St. . . .	1829		
Bayliss, Thos. { 45, Summer Lane	1829	1843	Plater on Steel.
{ Livery St., 1843			
Bloomer, Ben, Little Charles St. .	1829	1833	
Botteley, Thos., Water St.	1829	1833	
Cadby, Jas., 3, James St.	1829		
Carnell, Jos., 25, Rea St.	1829	1833	
Chamberlain, Chas., Camden St. .	1829		
Chambers and Cottrell, 44, Newhall St.	1829		
Child, Thos., Coleshill St.	1829	1833	
Cooke, John, Fleet St.	1829	1833	
Cox, John, Wharf Street	1829		
{ Ellis, Chas., Snow Hill	1829		
{ Ellis and Son, Snow Hill	1847	1850	
Farrington, Thos., 13, Foredrough St.	1829		
Fisher, Stephen, Dale End	1829	1833	
Fitzer, Thos., Moland St.	1829	1839	
Fowler, R., 23, Cannon St.	1829	1850	
Gibbs, Wm., Foredrough St. . . .	1829		
Gough, John, Bristol Rd.	1829		
Hall, { Shadwell St.	1829	1835	
{ Henry { Gt. Hampton St., 1833			
Hands, John, Prospect Row	1829		
Hardy, John, Caroline St.	1829		
Hardy, John, Gt. Hampton St. . .	1829	1835	
Hobday, John { 11, Legge St. . . .	1829	1850	
{ 32, Digby St., 1835			

BIRMINGHAM MAKERS

317

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
Kendrick, Wm., and Co. { 16, Bull Ring 52, Upper Gough St.	1829	1850	
{ Kirkham, Thos., 31, Cannon St. .	1829	1842	
{ Kirkham, Theophilus, 13, Cherry St., 1835	1839		
Ledward, John, Mount St. . . .	1829	1835	
Litherland and Newbold, 18, Smallbrook St.	1829	1850	
Marigold, John { Little Charles St. Newton St., 1839	1829	1849	
Moore, Jos., Newton St. . . .	1829		
Needham, Edm., Coleshill St. . .	1829	1842	
Page, Wm. { Belmont Row and Dale End	1829	1835	
{ Lawley St., 1835 . .			
Parkes, Jos., Queen St.	1829	1833	
{ Church St.	1829	1843	
Parkes, Wm. { 67, Newtown Row, 1841			
{ 15 Kennion St. .	1829	1850	
Parsons, Thos. { Gt. Hampton St., 1850			
Pinches and Laughton, 92, Gt. Charles St.	1829		
Powell, Eliz., 10, Carr's Lane . .	1829		
Prime, Thos., 18, Northwood St. .	1829	1850	
Richards, Thos., Caroline St. . .	1829		
Ryder, Chas. { Holloway Head .	1829	1841	
{ Holt St., 1833			
Sheppard, Jos., Aston St. . . .	1829		
Smith and Eades, Ludgate Hill .	1829		
Swinden and Co., 64, Bath St. . .	1829	1833	
Swingler, John { Vauxhall Lane .	1829	1842	
{ Heneage St., 1839			
Watson, Wm. { Staniforth St. . .	1829	1849	
{ Key Hill, 1849 . .	1849		
Wells, Richd., Edmund St. . . .	1829	1850	
Woodcock, { Church St., 1829 .	1829	1850	
Geo. { Caroline St., 1843. Mount St., 1847			
Woodcock, { Gt. Charles St. . .	1829	1842	
Geo. { Gt. Hampton Row, 1839			
Law, Jas., Cheapside	1829	1850	French Plater.
Walton, Wm., Doe St.	1829	1843	Ditto.
Wignall, Jos., Islington Row . .	1829		Ditto.
{ Blackford and Lawson, 2, Bread St.	1833		
{ Lawson and Holden, Gt. Charles St., 1839	1847	1850	

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
Chamberlain, John, Gt. Hampton St.	1833	1835	
Cottrell, Wm., 12, St. Martin's Place	1833	1835	
Field, Henry, 123, Livery St.	1833	1835	
Haley, Wm., 60, Loveday St.	1833	1835	
Laughton, Jas. { St. Paul's Sq.	1833	1842	
{ Hampton St., 1841			
{ Lowe, Isaac, 21, Lower Priory.	1833	1842	
{ Lowe, Isaac and Son, 21, Lower Priory	1841		
Ryland, Thos., and Son, 40, Newhall St.	1833	1835	
Welch, Thos. { Prospect Row	1833	1839	
{ Gt. Brook St., 1839			
Wilkinson, T., and Co., 13, Gt. Hampton St.	1833	1850	
Walker, Sam., 29, Park St., Bull Ring	1833	1850	Gig-apron knob plater.
Adams, John, 72, Newhall St.	1833		
Adcock, 12, Blews St.	1833		
Bate, Geo. (or { 23, Navigation St.	1833	1843	
{ Suffolk St., 1839			
Barber, Henry, 190, Bradford St.	1833		
{ Bent and Tagg, 42, Lionel St.	1833	1850	
{ Bent, Jos., Newhall St., 1839	1841		
Blackham, John { 33, Church St.	1833	1850	
{ Hanley St., 1839			
Blyth, John, Woodcock St.	1833	1839	
Bolton, Wm., 23, Gt. Lionel St.	1833		
Edmunds, Thos., 28, Ellis St.	1833		
Eustace, Charles { 60, Gt. Charles St.	1833	1842	
{ Henrietta St., 1839			
Heath, John, 6, Gt. Kennion St.	1833		
{ Heeley, Jas., and Son, Gt. Charles St.	1833	1850	
{ Heeley and Co., Union St., 1847	1847		
Hockley, Wm., Dean St.	1833		
Hughes, Jos., 5, Gt. Water St.	1833		
{ Jarvis, Chas., 29, Sheep St.	1833	1850	
{ Jarvis and Co., 29, Sheep St.	1847		
Myring, E., 13, Gt. Inge St.	1833		
Parton, Geo., 82, Caroline St.	1833		
Povey, Rich., Loveday St.	1833		
Proud, Phineas, 39, Aston St.	1833		
Redding Geo. (or { 23, Kennion St.	1833	1849	
{ Livery St., 1835			
Sawyer, { 20, Gt. Constitution Hill Geo.	1833	1842	
{ Henrietta St., 1839			

BIRMINGHAM MAKERS

319

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
Smith, Peter { Navigation St.	1833	1850	
{ Ashton Road, 1847			
{ Tongue, J., and Mary, 36, Ludgate Hill	1833	1839	
{ Tongue, John, 12, Smith St., 1839			
Archer, Jas., 14, Gt. Hampton St.	1835		
Banister, Chas., 16, Moland St.	1835		
Cole, Rich., New Summer St.	1835		
Cooper, Henry { 97, Bradford St.	1835	1839	
{ Ravenhurst St., 1839			
Devy, Wm., 8, Little Hampton St.	1835	1839	
Dugard, Barnabas, Bartholomew Row	1835	1850	
{ Gibbs, H. and J., Gt. Charles St.	1835	1842	
{ Gibbs, John, Gt. Charles St.	1839		
Hall, Jas., 30, Gt. Lancaster St.	1835		
Hughes, Wm., Park St.	1835		
Leather, John { Cardigan St.	1835	1839	
{ Howe St., 1839			
Oakes, John, 5, Islington Row.	1835		
Osborne, Sam., Aston Road.	1835		
Poller, Chris. { 48, St. Bartholomew St.	1835	1850	
{ Moor St., 1847			
Ravenall, Jas., 10, Hanley St.	1835		
Robothom, J., Vittoria St.	1835	1839	
Roberts, Robt. { 7, Bond St.	1835	1842	
{ Mott St., 1839			
Sherwin, Thos., Witton St.	1835		
Terry and Oakes, 127, Suffolk St.	1835		
{ Wallbank and Bassett, James St.	1835	1839	
{ Wallbank, Chas., James St.	1839		
Waterhouse, T., and Co., 45, St. Paul's Sq.	1835		
{ Waterhouse and Parker, 45, St. Paul's Sq.	1839	1850	
Waterhouse, Geo., 1, Horsefair.	1835	1842	
Barnes, Jos., 3, Gt. Bartholomew St.	1835		French Plater.
Merry, A. T. (? address)	1836		
Baker, John { Hall St.	1839	1850	
{ Vittoria St., 1841			
Bell, Rich. { Gt. Charles St.	1839	1850	
{ Hampton St., 1847			
Caldicutt, Henry { Lench, St.	1839	1849	
{ Price St., 1847			
{ Collis, G. R., Church St.	1839	1850	
{ Collis, G. R. and Co., Church St.	1841		
Crawford, J. and R., Brearley St.	1839		

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
{ Dugard, Wm., Upper Priory . .	1839 }	1850	
{ Dugard, Bros., Upper Priory . .	1847 }		
Endsor, Thos., New Canal St. . .	1839		
Gardner, Jas., Barr St.	1839		
Hobday, Sam., Bath St.	1839		
Homer, Wm. { Bromsgrove St. . .	1839	1850	
{ Hill St., 1847			
Lowbridge, Sam., Old Summer St.	1839	1842	
Lyne, John, Price St.	1839		
Minshull, Chas., Tyndall St. . .	1839		
Stanyard, Josiah, Holloway Head.	1839		
Tomlinson and Davies, Swallow St.	1839		
Woodward, Wm., Islington . . .	1839	1849	
Wright, Henry, Upper Hospital St.	1839		
Beech, R., Cecil St.	1839		
Davies, Charles { Mary Ann St. .	1839	1850	
{ Caroline St., 1847			
{ Hodgatts and Son, Loveday St. .	1839 }	1850	Or Hodgatts.
{ Hodgatts, J. Loveday St. . . .	1850 }		
Wilkes, Jas., Hill St.	1839		
Wotton, Robt., Cross St., Hill St.	1839		
Darby, John, Livery St.	1839		
Alexander, Jas., Gt. Charles St. .	1841	1850	
Aston, John Cyrus, 23, Snow Hill	1841	1842	
Baker, Henry, 23 ¹ / ₂ , Cannon St. . .	1841	1843	
Ballam, Chas., 7, Ludgate Hill . .	1841	1842	
Brownhill, Geo., 2, Gt. Bartholomew St.	1841	1850	
Buckley and Hope, 32, Hockley Hill	1841	1850	
Checketts, Wm., 70, High St. . . .	1841	1842	
Doleys and { 5, Oozells St. . . .	1841	1850	
Wilkes { Swallow St., 1847 . . .			
Gough, Wm., 11, Parade	1841	1850	
Lines, Austin, 8, Little Hampton St.	1841	1847	
Marrian, Francis, 14, Cannon St. .	1841	1850	
Powell, Wm., 49, High St.	1841	1842	
Shale, Devey, and { Gt. Charles St.	1841	1850	
{ Co. { Bath St., 1847			
Till, Edward, 35, Summer Lane . .	1841		
Oxford, Joseph, 15, Price St. . . .	1841		
{ Elkington, G. R. and H., Newhall St.	1841	1850	Inventors of Electroplating.
{ Elkington, Mason, and Co., Newhall St.	1847		
Baker, Isaac, 110, Gt. Hampton St.	1842		
Antrobus, John { Hockley Place . .	1843		
{ Vittoria St., 1849			
Greenfield, Jas., Legge St.	1843		
Kemp, Abraham, Barr St.	1843		
Onions, S. G. and H. J., Brook St.	1843	1850	

BIRMINGHAM MAKERS

321

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
Shepherd, Sara, Bristol St. . . .	1843	1847	
Ballemy, John, St. Paul's Sq. . . .	1847	1850	
Barnett, W., Smallbrook St. . . .	1847	1850	
Bushell, J., Lt. Hill St.	1847	1850	
Clarke, Mary, Garrod St.	1847	1850	
Crossbee, T., Coleshill St.	1847	1850	
Fearn, Thos., Parade	1847	1850	
Fielding, H., Gt. Hampton St. . . .	1847	1850	
Gloster, W., King Edward's Place .	1847	1850	
Jones, Henry, Northwood St. . . .	1847	1850	
Mills, M., and Co., Paradise St. . .	1847	1850	
Moore, Henry, Church St.	1847	1850	
Mousley, Thos., Camden St.	1847	1850	
Osborne, J., Albion St.	1847	1850	
Partridge, John, Digby St.	1847	1850	
Pendleton, T., Tanter Street	1847	1850	
Platt, Mark, Regent Row	1847	1850	
Ratcliff and Co., Mary St.	1847	1850	
Rogers, W., Constitution Hill	1847	1850	
Sheldon, John, Hampton St.	1847	1850	
Smith, T., Bartholomew St.	1847	1850	
Soutter, W., Newmarket St.	1847	1850	
Spurrier and Cornforth, Newhall St.	1847	1850	
Stanyard, T., Carver St.	1847	1850	
Sturges, R. F., Lichfield St.	1847	1850	
Turner and Son, Camden St.	1847	1850	
Tye, G. P., Caroline St.	1847	1850	
Warwick, T., Bread St.	1847	1850	
Wharton, T. and E., Snow Hill . . .	1847	1850	
Wheeler, J., Fordrough St.	1847	1850	
Wilson, Edw., Cross St.	1847	1850	
Woolrich, J., Gt. Charles St.	1847	1850	
Meaking, Jas., Kenion St.	1847	1850	
Blacker, J., 103, Barr St.	1849		
Bushill, J., Morley's Buildings . . .	1849		
Clarke and Timmins, 28, Exeter Street	1849		
Gibson, T., 8 and 9, Weaman St. . . .	1849		
Gold, Thos., 6, Livery St.	1849		
Hands and Dore, Ct. 11, Edmund Street	1849		
Hodgkins, T., Gough St.	1849		
Hooper, G. and T., Ct. 31, Lancaster St.	1849		
Hughes, John, 149, Livery St.	1849		
James, Arthur, Ct. 9, Fleet St. . . .	1849		
Jarvis, Henry, Fisher St.	1849		
Jenns, C., Belmont Row	1849		
Lowbridge, Samuel, 9, Unett St. . . .	1849		
Lowe, I. and E., 70, Sheep St.	1849		

Not traced after 1849.

SHEFFIELD PLATE

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
Low, I. and H., Fordrough St. .	1849	}	Not traced after 1849.
Mellows, J., Ct. 8, Summer St. .	1849		
Mills, S., 39, Howard St. . . .	1849		
Morris, R., 4, Market St. . . .	1849		
Palmer, Wm., Ct. 4, Bordesley St.	1849		
Short, E. C., 1, Bishop St. . . .	1849		
Waters, W., 17, Branston St. . .	1849		
Welch, G., and Co., 11, Dean St. .	1849		
White, John, 77, Palmer St. . . .	1849		
Wootten, J., 21, Bordesley St. . .	1849		
			Spoon and Snuffer Plater.



THE SOHO PLATE COMPANY.
(Late Matthew Boulton & Co. Plate L.)
 MANUFACTURERS OF SILVER & PLATED WARES.
 SOHO, STAFFORDSHIRE,
And 16 Salisbury Square
 L O N D O N.

BUSINESS CARD OF THE SOHO PLATE COMPANY (ABOUT 1790)

PLATE LXX



MEDAL, STRUCK IN MEMORY OF MATTHEW BOULTON BY HIS SON

DESIGNED AND EXECUTED BY PIDGEON, ONE OF THE MEDALLISTS
 EMPLOYED AT THE SOHO FACTORY

PLATE LXXI

[To face p. 322.]

CHAPTER XXV

MAKERS IN LONDON, NOTTINGHAM, EDINBURGH, GLASGOW, AND DUBLIN

Chronologically Arranged

LONDON MAKERS, 1776—1850

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
Roper, Wm., St. Martin's Lane, Long Acre	1776	1796	Plater and Jeweller (Bir- mingham Maker).
Abdy, Wm., 5, Oat Lane, Noble St.	1778	1821	Goldsmith and Plater.
Ellis, Richard, George St., Foster Lane	1779		Ditto.
Chitham, John, 70, Little Britain .	1784		French Plater and Gilder.
Curtis, Wm., 14, Ivy Lane	1784		Gold and Silver Flatting Mills.
Newman, Withers, 33, Drury Lane	1784		Plater and Founder.
Raybould, Wm., 93, Long Acre .	1784		Coach-founder, Plater, and Ironmonger.
{ Bromhead, Adam and Co., 16, Fos- ter Lane, Cheapside	1784 }	1800 {	Silver Platers and Cutlers (Sheffield Warehouse).
{ Bromhead, Hincliff and Co., 16, Foster Lane, Cheapside	1790 }		
{ Bromhead, Adam, 16, Foster Lane, Cheapside	1793 }		
Rawle, Valentine, Cursitor St., Holborn	1785		
Playfair, Wm., Howland St., St. Pancras	1785		Plated Buckle Maker.
{ Ashford, Ellis and Co., 28, Noble St., Foster Lane	1780 }	1811 {	Plated Warehouse (Shef- field Firm).
{ Ashford, Ellis, Wilson and Hawk- esley, 28, Noble St., Foster Lane	1790 }		
{ Steeres, John, Pall Mall	1786 }		
Holy, Daniel, Wilkinson and Co., 6, Crane Ct., Fleet St. (afterwards 8, New Bridge St., Blackfriars) .	1786	1829	Ditto.
Radcliffe, —, Frith St., Soho . .	1787	1840?	Silver and Plated Manu- facturers (Sheffield Firm).

Note.—Where one date only is given no further trace has been found.

SHEFFIELD PLATE

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
Vining and Wennington, 39, Kirby St., Hatton Gdn.	1786	1796	Sheffield and Birmingham Commission Warehouse.
Vining, Charles, 39, Kirby St., Hatton Gdn.	1791		
Baskerville, Sarah, 8, Albion Bldgs.	1790		
Beckett and Co., 54, Queen St., Lincoln's Inn Fields	1790	1796	Sadlers, Ironmongers, Founders, and Platers.
Beckett, W. and J., 54, Queen St., Lincoln's Inn Fields	1791		
Birch, Richard, 16, Princes St., Barbican	1790		
Black, Alex., Albion Pl., Blackfriars	1790	1793?	Gold and Silver Wire Flatter.
Deakin, Smith, Kitchen and Co., 47, Friday St.	1790		British Cast Plate Manufactory.
Fenton, Creswick and Co., 10, Crane Ct., Fleet St.	1790		Plated Warehouse (Sheffield Firm).
Fenton, Okes and Co., 10, Crane Ct., Fleet St.	1791	1796	Silver and Plated Manufactory (Sheffield Firm).
Fenton and Co., 10, Crane Ct., Fleet St.	1792		
Green, Joseph, 4, Poppin's Ct., Fleet St.	1790		
Harris, George, 4, Hatton Wall	1790	1812?	Plater and Gilder.
Hopkinson, Wm., 119, Fleet St.	1790		Small Worker in Silver, and Plater.
*Howard, Son and Lardner, 11, St. Paul's Churchyard	1790		Sheffield Plate Warehouse.
Legeix, F., or Legrix, 33, Long Acre	1790	1810	Birmingham and Sheffield Warehouse.
Lewin and Co., 107, Long Acre	1790		French Plater.
Lewin, R. and B., 107, Long Acre	1792		Platers and Coach Founders.
Lewin Robt., 107, Long Acre	1796		
Lewin and Watkins, 107, Long Acre	1803		
Lloyd, Wm., 94, Gt. Saffron Hill	1790	1823	Steel and Plated Patent Snuffer Manufacture.
Marriott, Thos., 11, Hop Gdns., St. Martin's Lane	1790		Flatting Mills.
Marshall, Richard, Shoe Lane	1790		Flatting Mills for Gold and Silver Metals.
Martin, Thos., 76, Wood St., Cheap-side	1790	1823	Wholesale Birmingham and Sheffield Warehouse, etc.
Phillipps, Jno. and Co., Gt. Queen St., Lincoln's Inn Fields	1790		Platers of Coach and Harness furniture and Bridle Bells (Birmingham Firm).
Phillipps and Son, 27, Little Queen St., Lincoln's Inn Fields, 1815	1815		
Phillipps, Peter, 27, Little Queen St., Lincoln's Inn Fields, 1815	1822		

* Note.—This firm (afterwards G. and T. Howard) was the only London firm to register a Mark at the Sheffield Assay Office. Their Mark—"A Chain"—was registered in 1809.

* Note.—This firm (afterwards G. and T. Howard) was the only London firm to register a Mark at the Sheffield Assay Office. Their Mark—"A Chain"—was registered in 1809.

LONDON MAKERS

325

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
Phillips, John { King St., Seven Dls. 28, Parker St., Lin- coln's Inn Fields, 1821	1790	1821	Flatter and Planisher of Metals.
Portal, Abraham { 19, Castle Lane, Holborn (afterwards) 98, Bishopsgate Within, 1796 . .	1790	1796	Sheffield Plate and Cutlery Warehouse.
Price, Robert, Short's Gdns, Drury Lane	1790		Founder and Plater.
Simpson, Archd., Brownlow St., Long Acre	1790	1800	Brass Founder and Coach Silver Plater.
Snellion, Ed., 18, Aldersgate St.	1790		Proprietor of the Flatting Mills.
Stephens, John, Brownlow St., Long Acre	1790		Brass Founder and Coach Silver Plater.
Summers, Wm., 98, New Bond St.	1790		Tin Plate Worker to the Prince of Wales, Plated Cutlery, etc.
Swain, Wm., 8, Hanover St., Long Acre	1790		Plater and Coach Founder.
Tagg, John, King Street, Drury Lane	1790		Coach Harness Plater.
Walford, J., 5, Brownlow St., Long Acre	1790		Plater and Coach Founder.
Barnard, J. and E. { Nicholl's Sq., Aldersgate Angel St., St. Martins-le- Grand, 1843	1790	1845	Flatters and Dealers in Coals.
Younge, J. T. and Sons, Fetter Lane	1790	1817 {	Sheffield Plate Warehouse.
Younge, Allanson and Co, Fetter Lane	1796		
Younge, Walker and Co., Fetter Lane	1803		
Younge, Walker and Crowder, Fetter Lane	1815		
Younge, Walker and Kitchen, 7, Beaufort Bldgs.	1817		
Young, Thos., 6, Fetter Lane	1790		Jewellery and Plate Warehouse.
Darbyshire, Geo., 8, Bridge St., Blackfriars	1790	1810	Plater and Hardwareman.
Allum, Francis, 99, Strand	1790		Plater, Founder, and Ironmonger.
Walker, Geo., 5, Gt. Windmill St., Lincoln's Inn Fields	1792	1806	
Parvin, John, 297, Kent St., Southwark	1793		Coach Plater and Founder.

SHEFFIELD PLATE

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
{ Ellis, Tucker, Machon and White- lock (or Machin?), 23, Castle St., Holborn	1796	1850	{ Sheffield Plate Ware- house.
Tucker, Fenton and Co., 23, Castle St., Holborn	1806		
Fenton, Allanson and Machon, 23, Castle St., Holborn	1821		
Allanson and Machon (or Allin- son?), 23, Castle St., Holborn .	1840		
Allanson and Co., 23, Castle St., Holborn	1850		
Green, Roberts, Mosley and Co., 66, Bartholomew Close	1796	1803	Ditto. Coach Founder, Plater, and Ironmonger.
Harris, John, 83, Long Acre . . .	1796		
Millachip, Wm., 10, Tavistock St., Covent Gdn.	1796	1840	{ Sheffield Plate Ware- house.
{ Mortons, Handley and Co., 39, Kirby St., Hatton Gdn.	1796		
Mortons and Co., Bouverie St., 1840	1810		
Scott and Kirton, Ball Ct., Gilt- spur St.	1796		
Stamps, Geo., 297, Kent St., South- wark	1796	1800	Gold and Silver Flatters.
Willmore, Thos., 18, Thavies Inn, Holborn	1796	1806	Sheffield and Birmingham Warehouse.
{ Goodman, Gainsford and Co., 8, Dyer's Bldgs., Holborn	1797	1821	Sheffield Warehouse.
Goodman, Gainsford and Fairbairn, 8, Dyer's Bldgs., Holborn . . .	1803		
Goodman, Gainsford, Fairbairn and French, 17, Castle St., Holborn .	1806		
Gainsford, R., and Co., 8, Castle St.	1815		
Gainsford and Nicholson, 8, Castle St.	1821		
Nevill, John, Ball St., Giltspur St. .	1799	1800	
Rolison, D., 5, Lombard St. . . .	1799	1801	
Tate, Robt., 18, Salisbury St., Strand	1799		
{ Lowe, W. and J., 3, Gt. Queen St., Lincoln's Inn Fields	1799	1827	Present Day Sheffield Warehouse.
Lowe, J., 3, Gt. Queen St., Lin- coln's Inn Fields	1815		
{ Watson and Bradbury, 8, Crane Ct., Fleet St.	1799	1806	
Watson and Co., 8, Crane Ct., Fleet St.	1806		
Watson and Co., 179, Aldersgate St., 1815	1815		
{ Bradbury and Son, 30, Bouverie St., Fleet St., 1822	1822		

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
Harper, John, 3, Child's Pl., Fleet St.	1799	1800	
Law and Co., 25, Fleet St.	1799		
Jones, E. and R., 2, Castle St., Holborn	1800	1806	
Lawton, J., { 18, Coppice Row, Clerkenwell, and St. John's Ct., Cow Lane, 1810	1800	1815	
Alsager and Son, Swan Yard, Blackman St.	1803	1821	
Battie and Brothers, 124, Fetter Lane	1803		
Betts and Son, 11, Bedford St., Covent Gdn.	1803	1821	
Bradford, Wm., 6, Crane Ct., Fleet St.	1803		
Bright, John, 36, Bruton St. . . .	1803	1821	
Brooks, Richd. { 3, Amen Corner. 10, Salisbury St., Strand, 1810 . . .	1803	1819	
Chippindall, R., 1, Bell's Bldgs., Salisbury Sq.	1803	1819	Silver and Plated Ware-house.
{ Ellerby, W., 8, Ave Maria Lane . . .	1803	1847	Wholesale Sheffield Ware-house.
{ Ellerby, Eliz. and W., 8, Ave Maria Lane	1840		
{ 2, Bride Ct., Fleet St.	1803	1821	Sheffield Warehouse.
Gunn, W. T. { 136, Salisbury Ct., 1806			
(or Gun) { 6, Hatton Gdn., 1815			
Holland, { 21, Bell Yd., Temple Bar Thos. { 47, Chancery Lane, 1810 . . .	1803	1819	
{ 167, Fleet St., 1815 . . .			
{ Hoole, R. and J., 16, Bride Lane . . .	1803		
{ Hoole, Jas., 36, Noble St., Cheap-side	1806	1810	Ditto.
{ 25, Fleet St.	1803	1815	Ditto.
Jones, Thos. { Falcon St., Fleet St., 1815			
Morris, T. { 131, Fetter Lane . . .	1803	1829	Ditto.
{ 20, Gt. Queen St., 1829 . . .			
{ Pass and Renwick, 4, Bouverie St. . .	1803		
{ Pass, W. { 4, Ingram Ct., Fenchurch St.	1810	1815	Sheffield and Birmingham Warehouse.
{ 40, Cateaton St., 1815 . . .			
{ Rowley, Wm., 67, Gt. Queen St., Lincoln's Inn Fields	1803		
{ Rowley, Thos., 189, Drury Lane . . .	1836	1838	Plater and Coach Iron-monger.

SHEFFIELD PLATE

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
Smith, S, { 16, Norton Folgate . . . 27, Barbican, 1819 . . .	1803	1821	Sheffield and Birmingham Warehouse.
Troby, J., Ship Ct., Old Bailey . . .	1803		
Young, Andrew, 38, Long Acre . . .	1803	1824	
{ Young, Adam, James St., Covent Gdn. Horne, Archibald, 11, Gt. Queen St., Lincoln's in Fields.	1823		
Brodie, H., 28, Falcon Sq.	1806	1840	Plater and Founder. Birmingham and Sheffield Warehouse.
Burr, Wm., 133, Long Acre.	1806	1810	Herald Chaser, Plater, and Founder. Birmingham and Sheffield Agent.
Corder, J., 1, Bush Lane, Cannon St.	1806		Coach Plater and Brass Founder.
Eldred, Thos., 53, London Wall	1806		Wholesale Sheffield Plate and Cutlery Warehouse.
Martin and Foster, 12, Foster Lane, Cheapside.	1806	1810	
Morhall, J., 18, Castle St., Holborn	1806	1821	Sheffield and Birmingham Warehouse.
Roberts, Cadman and Co., 8, Ave Maria Lane	1806	1815	Sheffield Plate Manufactory.
{ Atkinson and { 8, Pavement, Finsbury Eldred { 21, Foer St., Cripplegate, 1815	1810	1821 {	Coach Platers, Saddlers, and Ironmongers.
{ Atkinson, Eldred and Son, 21, Foer St., Cripplegate Barrett, Sam., 6, Gt. Bell Alley, Coleman St.	1819		
Boulton Matthew and Co., 1, Bell's Bldgs., Salisbury Sq.	1810	1821	Sheffield Warehouse.
Cooper, Ebenezer, 112, Bishops-gate Without	1810		Plate Company.
Eadon, Kibble, Weaver and Co., 3, Amen Corner.	1810		Coach Plater.
{ Eadon, G., and Co., Salisbury Sq., Fleet St.	1815	1815	Sheffield Warehouse.
Edwards, { Swan Yd., Blackman St. Martha { Nine Elms, Whitehall, 1819	1810	1821	Setter and Whitener.
Hougham, S., and Co., 138, Alders-gate St.	1810	1821	Birmingham and Sheffield Warehouse. Plater and Founder.
Lande, A., 106, Leadenhall St.	1810		
Lobban, John, 5, Gt. Wild St.	1810		
Neville and Kidder, Ball St., Giltspur St.	1810	1815	Flatting Mills.

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
Price, Rider and Ward, 164, Drury Lane	1810	1836	Saddlers' Ironmongers and Platers.
Price and Ward, 164, Drury Lane	1819		
Ward, Chas., 164, Drury Lane	1821		
Jenus and Ward, 164, Drury Lane	1822		
Ward, Charles, 164, Drury Lane	1823		
Redgrave, Wm., 25, Gt. Queen St., Lincoln's Inn Fields	1810	1850	French Plater.
Stubbs, Son and Gough, 6, Long Acre	1810		Platers and Hardware Men.
Biggs, Jas., 36, Charles St., Hatton Gdn.	1815		Birmingham and Sheffield Agents.
Boggis, G., 8, Castle St., Falcon Sq.	1815	1821	Ditto.
Gadsden, R. (or Gadsdon), 11, Gun St., Old Artillery Grnd., Spitalfields	1815	1840	Coach Plater.
Gadsdon, Geo., 11, Gun St., Old Artillery Grnd., Spitalfields	1840		
Shaw, Chas., Gough St., Fleet St.	1815	1845	Sheffield Warehouse.
Heming, John, 2, Bride Ct., Fleet St.	1815	1821	
Marlow and Sons, 43, New Compton St., Soho	1815	1840	
Marlow, Ben, 43, New Compton Street, Soho	1836		
Matthison, J., 52, Gt. Queen St., Lincoln's Inn Fields	1815	1819	
Micklethwaite, Ben, 30, Bartlett's Bldgs	1815	1821	
Nickolds and Roberts. { 5, Upper Conway St., Fitzroy Sq.	1815	1821	Silversmiths and Platers.
Nickolds, J. { And at their works, 45, Kirby St., Hatton Gdn.	1819		
Poynton, J. T. and Co., 10, Brook St., Holborn	1815	1821	Sheffield Warehouse.
Rowe, { 8, Aldersgate St.	1815		Silver Polisher and Dealer in Plate.
Thos. { 13, Aldersgate St., 1819		1821	Platers and Coach Founders.
Ryland, Jas., 128, Long Acre	1815		
Ryland, W., and Sons, 128, Long Acre	1819		
Thomas and Storrs, 16, Staining Lane	1815	1850	
Storrs and Beard, 106, Cheapside, 1821	1846		
Watkins, Gregory, 70, Gt. Queen St.	1815	1824	Plater and Coach Ironmonger.
Fentem, Webster and Danby, Pickett St., Strand	1818		Sheffield Firm.
Bell, Wm., 39, Clement's Lane, Lombard St.	1819		Goldsmith, Sheffield and Birmingham Warehouse.

SHEFFIELD PLATE

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
Blagden and Co., 8, Ave Maria Lane	1819	1821	Sheffield Plate Manufacturer.
Battie, Howard and Co., 12, Bell's Bldgs., Salisbury Sq.	1819	1821	Sheffield Plate Warehouse.
Chambers and Edkins, 69, Leadenhall St.	1819		Wholesale and Retail Sheffield and Birmingham Warehouse, Goldsmiths, etc.
Brown, { 8, Castle St., Falcon Sq. J. A. { Charles St., Long Acre, 1826	1819	1850	Sheffield, etc., Agent.
Broad, J., and Son, 149, Drury Lane	1819	1838	Platers and Coach Ironmongers.
Cowie and Sons, 84, Long Acre .	1819	1845	Refiners and Platers.
Hughes, C. W., 22, Brownlow St., Drury Lane	1819	1827	Coach Maker and Plater.
Mappin and Hall, 2, Bullhead St., Newgate St.	1819		Sheffield and Birmingham Warehouse.
Morgan, Thos., 10, Wallbrook .	1819		Sheffield and Birmingham Agent.
Piper, Jas., 14, Butcher Hall Lane, Newgate St.	1819	1821	Plated and Hardware Warehouse.
Royes and Dix, 138, Aldersgate St.	1819	1821	Silver Plate and Spoon Makers.
{ Trovell, J., and Co., 38, Castle St. East	1819 }	1850	Coach Platers.
{ Trovell and Armat, Oxford St. .	1848 }		
Watt, D., 5, Cross St., Long Acre	1819	1840	Coach Plater and Founder.
Williams, W., 166, Drury Lane .	1819	1840	Ditto.
Williams, J., 4, Amen Corner .	1819	1821	Sheffield and Birmingham Warehouse.
Wright and Co., 179, Aldersgate St.	1819	1821	Sheffield Warehouse.
{ Kirkby, Water- { 4, Bolt Ct., Fleet St. house and Co. { 16, Thavies Inn, 1829	1819 }	1850	Sheffield Plate Warehouse.
Waterhouse, Hatfield and Co., 16, Thavies Inn	1840 }		
Barlow, Wm., 28, Watling St. .	1821		Sheffield and Birmingham Agent.
Barton, Ed., 104, Hatton Gdn. .	1821	1850	Ditto.
Bullard, J., 37, High Holborn .	1821		Goldsmith, Silversmith, and Plater.
Forty, P., 50, Hatfield St., Blackfriars	1821		Birmingham and Sheffield Manufacturer and Agent.
Fox and Co., 45, Basinghall St. .	1821		Sheffield Warehouse.
Heehey, Jos., 58, Gt. Saffron Hill	1821		Silver and Plated Mounter.
Johnson, J., 23, York St., Blackfriars	1821	1824	Coach Plater and Founder.

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
Kelk, J., 2, Burleigh St., Strand .	1821	1849	Sheffield Warehouse.
Martin, { 11, Castle St., Holborn .	1821		
R. J., { 4, Palsgrave Place, 1846			
Overton, W., 29, Litchfield St., Newport Market, Soho . . .	1821	1823	Plater and Coach Fur- nisher.
Parsons, S., 7, Hanover St., Long Acre	1821		Ditto.
Patten and Mills, 2, Brownlow St., Drury Lane	1821		Plated and Metal Wire Warehouse (Birming- ham Firm).
{ Potter, T., 17, Craven St., Strand .	1821	1845	Coach Plater, etc. Birmingham and Sheffield Warehouse.
{ Potter, Wm., 17, Craven St., Strand	1840		
Pringle, John, 8, Berkley St., Clerk- enwell	1821		
Richards, John, 22, Martin Lane, Cannon St.	1821		
Thomas, { 15, Fisher St., Red Lion Sq.	1821	1838	Coach Plater and Bearer.
Jas., { Plumber's Ct., Holborn. 1836			
Turner, Geo., 35, Brook St., Hol- born	1821		Sheffield and Birmingham Warehouse.
Twist, Morris and Co., 20, Gt. Bell Alley, Coleman St.	1821		Plated Warehouse.
Walker, T., 10, Mercer St., Long Acre	1821	1824	Coach Founder and Plater.
{ Higgins, Robt., 9, Archer St., Gt. Windmill St.	1822	1849	
{ Higgins and Fontaine, 23, Long Acre	1824		
{ De La Fontaine, 9, Archer St. . .	1838		
{ Higgins, R., 9, Archer St. . . .	1849		
Bentley, Jos., 12, Brownlow St., Long Acre	1822	1834	Ditto. Coach Plater.
Blackman, Wm., 3, Hanover St. .	1822	1840	
Collenridge, { Paternoster Row .	1822	1836	
Jos. { Union St., Bishops- gate, 1832			
Freeth, Henry, 29, Little Sutton St.	1822	1827	Steel Plater.
{ Gadson, Geo. { 11, Green St., Bis- hopsgate	1822	1850	Coach Plater.
{ Gadson and Son {	1840		
{ Gadson, C. and Ben. { Union St., 1838 .	1846		
{ Neville and Co., 16, King St., Bloomsbury	1822	1834	Coach Harness Platers.
{ Neville and Holden, 16, King St., Bloomsbury	1823		

SHEFFIELD PLATE

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
Ratcliff, P., 9, Queen St., Grosvenor Sq.	1822	1850	
Ratcliff, J. N., 9, Queen S., Grosvenor Sq.	1840		
Ratcliff, Horatio, 9, Queen St., Grosvenor Sq.	1848		
Thomson, Ed., and Co. (or Thomson ?), 1, Londonhouse Yard, St. Paul's	1822	1824	Birmingham Firm.
Whitehouse, John, 5, Mead Place, Westminster Rd. (and at 32, Old Compton St.	1822	1849	
Wilson, E., 1, Vigo Lane, Leicester Sq.	1822	1824	
Longstaffe, Geo., 7, Noble St., Foster Lane	1822	1827	Plater and Pearl Button Manufacturer.
Crowley, Wm., 200, High Holborn	1822	1824	
Austin, Geo., 56, Long Acre	1822		
Canning, John, 12, Brownlow St., Long Acre	1822	1834	Coach Plater.
Carter, J. W., 8, Mercer St., Long Acre	1822	1838	Ditto.
Deykin, Thos., 26, Mercer St., Long Acre	1822	1823	Ditto.
Gough, Jas., 12, Rupert St., Haymarket	1822		Ditto.
Grove, John, 22, Mercer St., Long Acre	1821-2	1824	Ditto.
Butler, John, 24, Up. St. Martin's Lane	1822	1838	Ditto.
Butler, Wm., Neal's Passage, Seven Dials	1836		
Kelly, John, 23, Wells St., Oxford St.	1823	1850	Ditto.
King, T. C., 30, Drury Lane	1823	1824	Ditto.
Latchford, Ed., 14, Up. St. Martin's Lane	1823	1824	Ditto.
Norman and Stephens, 91, Wimpole St.	1823	1846	Ditto.
Norman, J.	1836		
Bishop, Wm., Middle Row, Holborn	1823	1827	
Seymour, Geo., 4, Helmet Row, St. Luke's	1823	1838	Plater, and Coach and Chair Moulding Maker.
Northcote, R., 51, Brownlow St., Drury Lane	1823	1838	
Short, Ed., 5, Little Russell St., Bloomsbury	1823	1838	

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
Slater, W., 32, James St., Manchester Sq.	1823	1827	
Smith, Geo., 3, Hanover St., Long Acre	1823	1827	
Smith, W.	1826		
Thomas, T., Eagle St., Red Lion Sq.	1823		
Thomas, C., Eagle St., Red Lion Sq.	1826		
Thomas, Henry, Eagle St., Red Lion Sq.	1828	1848	Coach Platers.
Thomas, John, Eagle St., Red Lion Sq.	1846		
Bennett, Geo., 70, Gt. Queen St., Lincoln's Inn Fields	1826	1834	Plater and Beader.
Cooper, John, 22, Newton St., High Holborn	1826		Coach Plater.
Dawes, Jas., 11, Granby Bldgs., Drury Lane	1826		Ditto.
Holden, John, 16, King St., Holborn	1826		Ditto.
Horton, R., 16, Wood St.	1826		Ditto.
Macdonald, Wm., 49, Gt. Wild St., Lincoln's Inn Fields	1826	1850	Ditto.
Rotton, Robert, 5, Baltic St., Golden Lane	1826	1849	Ditto.
Robinson, Martin, 16, Baltic St., Golden Lane	1826	1827	Ditto.
Snook, Robert, 38, King St., Drury Lane	1826	1827	Ditto.
Arden, Thos., 5, Hosier Lane	1826	1827	
Kingsley, Jas., 2, Bowling-green Lane, Clerkenwell	1826	1827	Cruet-frame Plater.
Stokes, Wm., 22, Peartree St., St. Luke's	1826	1827	French Plater.
Ward, —, 25, Cursitor St.	1826	1827	
Watmore, Hy., 76, Tothill St.	1826	1827	
Smith, Alex. (?address)	1826	1827	
Poliver, Robt., 19, Hanover St., Long Acre	1826	1827	French Plater and Brass Finisher.
Watson and Cooper, 29, King St., Soho	1830	1845	
Armstrong, Isaac, 36, King St., Snow Hill	1832	1848	Coach Plater.
Avern, Thos., 9, West Street, Soho	1832	1850	Ditto.
Beckwith, Henry, 52, Gloster St., Queen Sq.	1832	1838	Ditto.
Bedford, John, 31, Castle St., Long Acre	1832	1834	
Colliver, Robt., 15, Denzell St.	1832	1836	French Plater.

SHEFFIELD PLATE

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
Dunkin, Jos. { 3, Pemberton Row, Gough Sq. 6, Roll's Bldgs., Fetter Lane, 1845	1832	1850	
Hughes, Geo., 3, Red Lion Market, Whitecross St.	1832	1834	French Plater.
Moore, Geo., 54, Old St.	1832	1834	Silver and Brass Moulder.
Nicholds, Wm., 3, Buckingham Place, Fitzroy Sq.	1832	1840	
Radclyffe, { 4, George St., Adelphi Hy. { Frith St., Soho, 1845	1832	1849	
{ Ratherham, Chas., 29, Bartlett's Bldgs.	1832 }	1850	Birmingham Firm.
{ Ratherham, C., 29, Bartlett's Bldgs. 1847 }	1847 }		
Roberts, Sam., 6, Bridgewater Sq.	1832	1834	
Roberts, Smith and Co., 8, Duke St., Villiers St.	1832	1849	Sheffield Firm, Jas. Lowe, agent.
Smith, John, 8, Northampton Bldgs., Clerkenwell.	1832	1838	French Plater.
Ward, Jos., 29, Bartlett's Buildings	1832	1834	
Warne, Robt., 9, Berry St., Clerk- enwell	1832	1840	French Plater and Gilder.
Warry, Abraham, 16, Queen St., Clerkenwell	1832	1834	
Boss, Thos., 18, Charterhouse St. .	1832	1836	
Cole, Wm., 36, Whitehorse St. . .	1832	1834	
Cooper, Thos., 32, Grafton Street, East	1832	1834	
Cooper, Thos., 32, Belton St., Long Acre	1832	1834	
Eldrid and Son, 21, Fore St., Crip- plegate	1832	1836	
Gates and Son, 37, Gt. Queen St., Lincoln's Inn Fields	1832	1834	
Green, Richard, 20, Lisle St., Lei- cester Sq.	1832 }	1836	
Green, I. and W., 20, Lisle St., Leicester Sq.	1836 }		
Hopkins, J. { Thomas St., Ken- nington	1832	1850	
{ Devonshire St., Ken- nington, 1834			
{ White Hart St., Ken- nington, 1846			
Jones, Geo., 31, Orchard St. . . .	1832	1840	
Keall, G. and Co., 9, Sarah's Pl., City Road.	1832	1834	
Marson, Henry, 12, West St., Seven Dials	1832	1846	

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
{ Neal, John, 17, Gt. Queen St., Lincoln's Inn Fields	1832 }	1848	
{ Neal and Son, 17, Gt. Queen St., Lincoln's Inn Fields	1846 }		
Tatton, Henry, 27, Little Queen St., Holborn	1832	1836	
Walters, Jos., 18, Well St., Cripple- gate	1832	1834	
Wilkins, Thos., 3, George St., Soho	1832	1836	
Williams, Sam., 23, Castle St., Long Acre	1832	1834	
Brown, Wm., 2, Belton St., Long Acre	1836		Plater and Burnisher.
{ Dale, Ed., 7, Bishop Ct., Chancery Lane	1836 }	1849	
{ Dale, Mrs. Sara, 7, Bishop Ct., Chancery Lane	1845 }		
{ Dale and Co., 7, Bishop Ct., Chan- cery Lane	1849 }		
Jackson, J. S., 3, Little Carter Lane	1836		
Barnett, Wm., 21, Leystall St. . .	1836		
Beesley, Jas., 12, Nottingham Ct., Long Acre	1836		Coach Plater.
Belliston, John, Queen's Pl. . . .	1836	1840	Ditto.
Bold, Jas., Pitt's Pl., Gt. Wild St. .	1836		Ditto.
{ Buckley, Henry, Parker's Pl., Drury Lane	1836 }	1850	Ditto.
{ Buckley, Jas., 56, Gt. Wild St., 1846	1846 }		
Carlisle, Peter, 40, New St., New Cut	1836		Coach Harness Plater.
Cumby, Thos., 16, Gt. Barlow St., Marylebone	1836		
Hall, John, 16, King St., Holborn .	1836		
Hitchinson, Ben., 22, Eagle St., Holborn	1836	1848	Coach Plater.
Hopkins, { 13, Charles St., West- minster Rd.	1836	1848	Ditto.
Fred { Regent St., Lambeth, 1846.			
Murden, Ed., 4, Chapel Pl., Lin- coln's Inn.	1836	1838	Ditto.
Redman, Geo., 2, Short St., New Cut	1836		
Thomas Charles { 15, Coldbath St. 56, Portpool Lane, 1838	1836	1838	
Wilks, Jas., 17, Great St. Andrew St., Seven Dials	1836	1838	Plater, Beader, Boot-spur and Box maker.
Horton, Wm., 7, Lisle St., Leicester Sq.	1838	1847	

SHEFFIELD PLATE

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
Jackson, { 243 ¹ / ₂ , Strand. Sam { 8, Milford Lane, 1845 .	1838	1845	
Overton, Jas., 17, Queen St., Oxford St.	1838	1850	Coach Plater.
Allen, Ben., 27, Mercer St., Long Acre.	1838	1845	Coach Founder and Plater.
{ Barlow, Jonathan { 30, George St., Oxford St. . 6, Queen St., Grosvenor Sq., 1846 .	1838	1850	Ditto.
{ Barlow, Mrs., 6, Queen St., Grosvenor Sq., 1846	1850		
Coston, Wm. (or Caston), 25, Gun St., Bishopsgate	1838	1850	Coach Plater.
{ Murcott and Stephens, 109-110, Long Acre.	1838		
{ Murcott, Jonathan, 109-110, Long Acre.	1846	1849	Coach Platers.
Phillipps, Jos., 49, Gt. Wild St. .	1838		Coach Plater.
Rosser, John, 24, Silver St., Golden Sq.	1838		Ditto.
Allport, Jas., 4, Thavies Inn, Holborn.	1840	1850	Ditto. Birmingham Firm.
Makepeace and Walford, 5, Serle St.	1840	1850	
Potter, Wm., 17, Craven St., Strand	1840	1849	
Prime, Thos., 49, Salisbury St., Fleet St.	1840	1850	
Spooner and Co., 40, Salisbury Sq., Fleet St.	1840	1850	
Wilkinson and Co. (Agent, E. Binyon), 12, Bell's Bldgs., Salisbury Sq.	1840	1850	Sheffield Firm.
Watson and Son (Agent, R. Reading), 21, Salisbury St., Strand .	1840	1848	Ditto.
Myers, Fred., 63, Dean St., Soho .	1840		
Gordon, Chas., 36, Southampton St., Pentonville	1840		
Gray, John, 5, Billiter Sq.	1840	1850	
Whalebone, Geo., 15, Union St., Bishopsgate	1840	1849	Coach Plater.
Walker and Knowles, 7, Beaufort Bldgs., Strand	1842	1850	
Howard and Co., 5, Salisbury St., Strand	1842	1850	
Light, Wm., 86, Snow Hill	1842	1846	
Morton, C. E., { 2, Bouverie St. . and Co. { 61, Fleet St., 1846	1842	1846	
Barber, Wm., 29, Bartlett's Bldgs. .	1842	1850	

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
Davis, A., and Co., 59 and 60, Houndsditch	1842	1850	Birmingham Maker.
Dixon, Matt., 35, Castle St., Holborn	1842	1850	
Fielding, Henry, 16, Thavies Inn	1842	1850	
Frith, Bros., 46, Lisle St.	1842	1848	
Frith, Peter and Co., 4, Bolt Ct., Fleet St.	1842	1850	
Gilbert, John, 11, Dyer's Bldgs., Holborn	1842	1850	
Armitstead, Henry, 3, Hill St., Finsbury	1846	1848	
Gough, Wm., 75, Hatton Gdn.	1846	1848	
Wilkison, Geo., 41, Tavistock St., Covent Gdn.	1846	1850	
Binyon, Alfred, 40, Tavistock St.	1846		
Casper, Judah, 17, Bury St., St. Mary Axe	1846	1849	Sheffield Firm.
{ Cowie, John, 11, Holles St., Cavendish Sq.	1846	1850	
{ Cowie, Mrs. Sara, 11, Holles St., Cavendish Sq.	1847		
Francis, T., 7, Beaufort Bldgs.	1846	1849	
Hawkesworth, Eyre and Co., 16, Devreux Ct.	1846	1850	
Hobson, Henry, 68, Houndsditch	1846	1850	
Sarl, J., and Sons, 18, Cornhill, and 18, Poultry	1846	1850	
Smith, John, 3, Jewin Crescent	1846	1850	
Turner, Jos., 43, Ludgate Hill.	1846		
Tatnell, Henry, 49, Salisbury Sq.	1846	1850	
Pye, George, 3, Langley St., Long Acre	1846	1849	
Parker and Sons, 61, King William St., City	1847	1848	
Brindle and Co., 17, Cross St., Hatton Gdn.	1847	1850	
Short, John, 15, Lime St., City	1848	1850	
Cranbrook and Co., 136, High Holborn	1848	1850	
Padley, Parkin and Co., 21, Salisbury St.	1848	1850	Coach Platers.
Campbell Bros., 3, St. Michael's Alley, Cornhill	1848	1849	
{ Stringer and Hayward. { 20, Northumberland St., New Road	1848	1849	
{ Stringer, S. { Nottingham Street, Marylebone, 1849			

NOTTINGHAM MAKERS

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
Powell, Charles, Melbourne St. .	1825	1848	
Kitchen, Charles, Glasshouse St. .	1832	1834	
Sheldon, John, Parliament St. . .	1832		
Lindley and Askew, Hockley . .	1844		
{ Lindley, Wm. { Lenton St. . . .	1848	1888	
{ Lindley, Wm. { 7, Middlemarsh .	1869		
{ and Son { 22, Chesterfield St.	1888		
{ Askew, Henry { 7, Broad St. . . .	1848	1879	
{ 7, George St., 1864			
Peekin, Jas., Mount St.	1848		
Dearn, John, Newcastle St. . . .	1853	1858	
Dean, John, 18, Clare St.	1855		
Sanders, John, 62, Cannon St. . .	1862		
{ 32, Broad St.	1868	1904	Plated Measure Manu- facturers.
Oldham, Thos. { 13, Plough and Harrow Yard .			
Varley, Fred., 8, Portland Place .	1887	1900	Plated Measure Manu- facturers.
Clements, A.,	1895	1899	Plated Measure Manu- facturers.
Henry, Fred.	1895	Present Day	

Note

Nottingham does not appear to have begun the manufacture of "Sheffield Plate" until very late, and seems also to have continued it to a comparatively recent date. The earliest maker's name appears in 1825, and some of the firms quoted above were certainly extant at the close of the last century. The goods made in Nottingham were chiefly confined to measures and drinking vessels, parts of which at least were made by the old method.

EDINBURGH MAKERS, 1800-1862

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
{ Cunningham and Simpson, Blyth's Close, Castle Hill	1800 }	1862 }	Described in 1835 as Plater and Saddlers' Ironmonger.
{ Simpson and Graham, Mound Pl.	1825 }		
{ Cunningham, John, 7, James Ct.	1816 }	1837 }	
{ Cunningham, Murdoch, 74, Lauriston Pl.	1817 }	1826 }	
{ Simpson, John, Head James Ct.	1800 }		
{ Simpson, J. S., Head of Mound .	1806 }	1825 }	
{ Simpson, J., Mound Pl.	1824 }		
Mathie and Sinclair, Head Calton .	1800		
Bell, Stewart, Milnes Ct.	1824	1837	
Bennet, Wm., 78, West Bow	1824	1848	
Dunlop, David, 145, Cowgate	1825		
Pearson, Wm., 6, St. Patrick Sq. . .	1825		
Glass, Robert { 322, Lawnmarket. Victoria St., 1862.	1838	1862	
{ Hutcheson and Ramsay (? address)	1838 }		
{ Hutcheson, M. B., 531, Castle Hill	1839 }	1839	
{ Thomson, A. and D., 28, Niddry St.	1844 }		
{ Thomson, A., 28, Niddry St. . . .	1847 }	1849	
Robb and Whittall, 39, Thistle St. Lane	1844	1845	
Kemp, J., 81, High St.	1846	1849	
{ 8, East Rose St. Lane	1847	1850	
Mackenzie, J. { 11, Corrubers Close, 1849.			
Cowan, A. and D., 611, Castle St.	1858	1862	
Crichton, W., N.W. Thistle St. Lane	1858	1862	

Note

It would appear from the above list that the families of Cunningham and of Simpson were for many years connected with the Plating Trade in Edinburgh: the partnership of "Cunningham and Simpson," first mentioned in 1830, becoming dissolved about the year 1825. After that date there seem to have been several branches of the original Firm engaged in the business, the firm of Simpson and Graham being the most important and lasting until about 1860-1862.

Note by the Author

The above are all the names of Edinburgh platers that it has been possible to trace up to the present time: I should be grateful for any additional names, or for any further information on the subject.

GLASGOW MAKERS

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
{ Thompson, Robt., Cochrane St. .	1818	1848	House, 92, Queen St.
Thompson, Robt., Cochrane St., North Side	1820		
Thompson, Robt., Senior, Coch- rane St.	1826		
Thompson, Robt., Senior, 33, Stock- well	1829		
Thompson, Robt., 33, Stockwell .	1831		
Thompson, Robt., 18, Stockwell St.	1835		
Thompson, Robt., 78, Stockwell St.	1838		
Thompson, Robt., 35, Stockwell St.	1846		
Mayling, Thos., 148, Trongate . .	1833		
Mayling, Mrs., 148, Trongate . .	1834		
Mayling, C., 148, Trongate . . .	1838	1848	And at 6, St. Andrew's Lane.
Mayling, Mrs., 148, Trongate . .	1839		
Mayling and Co., 148, Trongate .	1840		
Mayling and Co., 60, Stockwell St.	1846		
{ Parkin, W. J. and Co., 32, Bruns- wick St.	1835		
Parkin, W. S. and Co. (?), 33, E. Howard St.	1842		
Parkin, W. and J., 33, E. Howard St.	1846		
Parkin, W., 33, Howard St. . . .	1848		
Robertson, John, 33, Stockwell St.	1836	1837	
Rait, D. C., 16, Argyle St. . . .	1838	1840	

Note by the Author

The above are all the Glasgow "Sheffield Platers" whose names I have been able to trace at the present time; yet it is practically certain that other firms existed in Glasgow, and at an earlier date. I should be extremely grateful for any information bearing upon the subject.

No known marks.

DUBLIN MAKERS

NAME AND ADDRESS.	EARLIEST MENTION.	LATEST MENTION.	REMARKS.
{ Renshaw, John, 35, Lower Ormonde Quay	1805	1811	Coach Platers.
{ Renshaw, J. and Son, Lower Ormonde Quay	1809		
{ Rochfort, James, 27, Lower Strand St.	1805		
Bennet Samuel, 8, Aungier St. . .	1809	1811	
Twist, Joseph, 35, Arran Quay . .	1809	1811	
{ Ravell, Joseph, 17, Sycamore Alley	1809	1827	Or Revell.
{ Ravell, Charlotte, 17, Sycamore Alley	1820		
{ Rooke, G., 15, Lower Exchange St.	1809		
{ Rooke, Margaret, 15, Lower Exchange St.	1820	1827	
Smith, Alexander, 2, Crow St. . .	1820	1827	
Figgis, Thos, 72, Abbey St. . .	1820	1827	
Lynch, Nicholas, 3, Essex Quay . .	1820	1827	
Smyth, John, 11, Eustace St. . .	1820	1827	
Bramble, John, 7, Bow Lane . .	1824	1827	
Byrne, Henry, 55, South St. George's St.	1824	1827	Coach Harness Maker and Plater.
Drake, George, 1, Patrick's Close .	1824	1827	
Jones, William, 34, Chancery Lane	1824	1827	
Marsh, Charles, 1, Prince of Wales Ct., Skinner Row	1824	1827	
Payne, Jonathan, 5, Patrick's Close	1824	1827	
Revell, John, 21, Ross Lane . .	1824	1827	

Note

In the "Dublin Mercury," 1769-1770, the following advertisement appears: "Henry Sullivan in Crampton Court has to-day imported a large collection of plated candlesticks, the newest patterns, coffee-pots, kitchens, salts, snuff-dishes, cruet frames, coasters, bridle-bits, and other articles in the plated way—Dutch kitchens, plain, and with plated furniture."

Note by the Author

The above names of Dublin "Sheffield Platers" are all it has been possible to trace up to the present time; but "Sheffield Plate" was undoubtedly made in Dublin at a far earlier date. I should be grateful for any further information on the subject.

No known marks.

CHAPTER XXVI

FOREIGN SHEFFIELD PLATE

French

AS already described in another part of this book, the process known as "French Plating" is entirely different from what we call "Sheffield Plating." In "French Plated" articles the method of covering the base metal was to apply leaf silver either before or, if more convenient, after the piece was made up. This process, technically termed "*Argenture au Pouce*," offers the advantage of enabling a piece to be partly repaired without the necessity of replating a whole article. Very large specimens were sometimes made by this process—silver leaves being applied by heating and rubbed in with steel burnishers: from twenty to sixty leaves were used according to the desired durability of the article. For gold-plated wares the method of "*Amalgamation*" was used in France from very early times, and appears to be still in use in some towns.

It hardly seems that any plated goods were made in France according to the "Sheffield" plating process; though a certain quantity of "Old Sheffield" must have been imported into France, and several of the English makers had branches in the larger French cities. French plated goods differ from the English in many respects: they are frequently excellent in point of design, yet always characteristically French. Dies were used in their construction; the base metal was, as in Britain, copper until the introduction of German silver; but the mountings appear to have been seldom, if ever, made in solid silver.

It has not been possible to ascertain clearly what mark French plated goods bore previous to 1797: articles of solid silver plated or covered with gold (which we know as "*Silver-gilt*") were, as early as 1765, required by law to be stamped "*Argent*"; but it

was not until 1797 that, under the Republican Government, a law was passed making it compulsory for all plated goods, whether of gold or silver, to be stamped "Doublé."

Extracts from the Decrees referred to are here quoted:

1765, Dec. 2. "Requiring all silver articles, plated or covered with gold, to be distinctly stamped 'Argent.'"

1797, 16th Brumaire (19 November), Titre VII. Art. 95. "Whoever desires to plate or gild on copper, or any other metal, is bound to make the declaration to his municipality, to the administration of his department, and to the Mint."



Art. 96. "He may employ gold and silver in any proportion he desires."

Art. 97. "He is bound to place upon each of his works his own punch, determined by the Mint, as stated in Art. 14 of the present law. He shall add to the stamp numerals indicating the quantity of gold or silver contained in the work, on which shall also be impressed in full the word 'Doublé.'"


Art. 98. "The maker of 'Doublé,' or plated goods, shall transcribe daily the sales he shall have made, on a register ruled and headed, furnished by the Municipal Administration."

It may be understood from the above that after the year 1797 all pieces of French plate must bear as a Mark the word "Doublé": a French-made specimen can therefore be traced without difficulty, though it does not appear that this law affected plated goods imported into France.

Examples of Marks

MARK AND NAME.	CIRCA.	ARTICLE AND OWNER.	REMARKS.
	1800	Teapot: The Author Cream jug: Mr. A. J. Brown	See Plate LXXIV
	1800	Entrée dishes: Mr. W. Lee Inkstand: The Author	

Unascribed French Mark

MARK.	CIRCA.	ARTICLE AND OWNER.	REMARKS.
	1780	Punch bowl: A. J. Bethell, Esq.	See Plate LXXIII

Dutch

Old Dutch "Sheffield Plate" is not so characteristic as French; in point of workmanship and construction the Dutch maker seems to have used both the English and French methods. Much English Sheffield Plate also was imported into Holland, and the Dutch (who had long been eminent silversmiths), in copying the English plating process, seem also to have adapted many of the English patterns. They do not seem, however, to have accepted the change in fashion at the beginning of the Nineteenth Century, but adhered to the simple and more fragile designs in vogue during the First Period of Sheffield Plate.

Marks.—There are no marks (to the Author's knowledge) found on Dutch "Sheffield Plate."

Russian





An enormous amount of "Sheffield Plate," especially of the later period, was made in Russia and Poland. As early as the Eleventh Century Russia had been famous for gold and silver wares, and since the Fifteenth she has made and exported large quantities of tinsel gold wire. In recent years much plate was made in the Russian dominions, according to the "Sheffield" method, especially in Warsaw, where at one time there were ten factories, employing altogether 2,000 workmen.

The patterns used for Russian Sheffield Plate were essentially English of the Second Period, though the workmanship never seems to have reached the high standard of this country. It is hardly possible to say when the manufacture of Sheffield Plate began in Russia, probably early in the Nineteenth Century; it continued until almost the present day, though much of the recently made plate is very poor in quality.





It may be noted as a peculiar feature of all "Sheffield Plate" made in Russia that such articles as tea- and coffee-pots, etc., are nearly always gilt-lined.

There were several laws controlling the marking of plate both in Russia and Poland, and it was evidently compulsory to mark all pieces.

Examples of Marks

MARK.	CIRCA.	ARTICLE AND OWNER.	REMARKS.
 ИЕИИ	1800	Tray: The Author	The period is assigned by the contemporary English design: the piece is probably of much later date
ИЕИЬ	1800	Tray: The Author	With Russian Eagle, as above
	1843	Large lamp: Mr. A. J. Davis Coffee pot: Mr. R. R. Cross	"1843" refers to the date of the piece
Ditto	1842	Coffee pot: Mr. T. Edwards	Same mark: but dated "1842"
ROSENSTRAUCH	1810	Tray: The Author	The name beside a Russian Eagle, as above
 	1840	Wine coolers: The Author	See Plate LXXVI

Unascribed Foreign Marks

MARK.	CIRCA.	ARTICLE AND OWNER.	REMARKS.
	1830	Coffee tray: Mr. R. R. Cross	Bought in Russia
	1840	Tray: The Author	
	1830	Cream jug: Mr. Harry Symons	
	1830	Sugar basin: The Author	
D.R. C.P.	1830	Cream jug: Mr. R. R. Cross	

ILLUSTRATIONS

FOREIGN SHEFFIELD PLATE

PLATE LXXII

Punch Bowl

Plated, made by the "French Plating" method.

The foot and bottom part of the bowl raised; the upper part of the wire work hard soldered. Fitted originally with a flint glass lining.

The glasses were held in position as shown in the Illustration, and the bowl brought to table fully fitted with glasses. The glass here illustrated is not a correct Punch Glass, but ought to be much shorter.

Size: $13\frac{1}{2}$ by $10\frac{1}{2}$ inches and $6\frac{1}{2}$ inches deep.

Bears the unscribed French mark shown on page 344.

Circa 1780.

The property of Messrs. Holmes and Mapleson.



PLATE LXXIII

Teapot

The body is raised, though no seam is perceptible. Separate bottom, edges of spout and lid covered with silver U-shaped threads.

Bears the well-known French maker's mark, "Balaine, Paris."
(See "French Makers' Marks.")

Circa 1810.

From the Author's Collection.



PLATE LXXIV

Mustard Pot

Almost entirely die-work; the sides from a die and joined in two places. The open-work saw-pierced. Blue glass lining.

Circa 1790?

From the Author's Collection.

Salt (one of a set of four)

Constructed in the same way as the mustard.

Circa 1790?

From the Author's Collection.

"Tabakscomfortje" (Dutch Pipe-lighter)

Usually found in a set consisting of an oblong box about seven inches long by four inches broad and three inches deep for long wooden matches, a round box about four inches in diameter by three inches deep for tobacco, and the article here shown, which was used for burning peat. The fumes were agreeable to the smoker who re-lit his pipe at the "Tabakscomfortje."

These pipe-lighters were in general use in Holland until quite recent years, and are also found in brass and copper.

The present specimen is raised, the edge pierced and flat-chased. It has a wooden handle and feet to act as a non-conductor of heat.

Circa 1800?

From the Author's Collection.

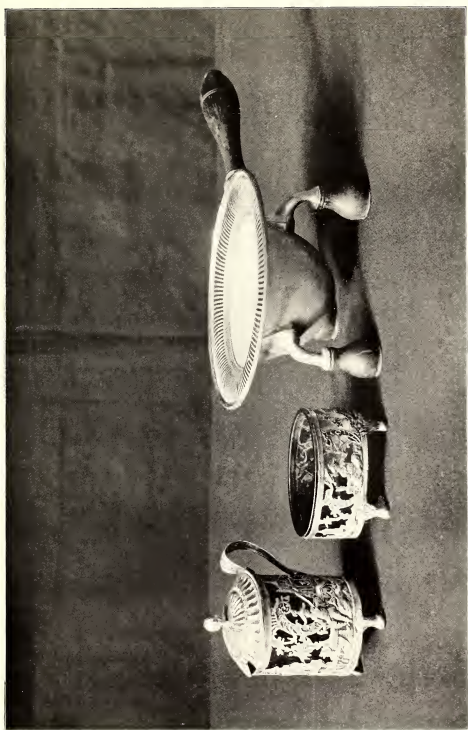


PLATE LXXV

Wine Cooler (one of a pair)

Raised with a seam and separate bottom in the same manner as if of English manufacture.

The handles and feet of copper-plate from dies: the mounting round the top edge is of silver, the edge and mount being fitted together by turning the edge into the mount. The inside is tinned.

They bear the marks shown on page 345.

Circa 1850.

From the Author's Collection.



INDEX

- A**CTS of Parliament, 5, 6, 16, 268 *et seq.*
 Alexander the Coppersmith, 29, 53.
 Alfred the Great, 4.
 Alston, James, 79.
 Anketil, 4.
 Annealing, 26, 200.
 Ashley, Lord, 255.
 Assyrian metal workers, 2.

 Barrett, Oglethorpe Wakelin, 257.
 Beckman, 64.
 Birmingham, 18, 218, 219; platers compelled to register at Sheffield, 16, 272; Hutton's "History of" quoted, 74, 75, 76; buckle and button making in, 74; free from trade guilds, 218; scarcity of marked pieces, 274.
 Birmingham Assay Office, 16, 268, 293.
 Birmingham makers, 300-322.
 Blisters, method of dealing with, 26.
 Bolsover, Thomas, 9, 13, 14, 25, 74, 260.
 Bond, Dr. John, quoted, 254.
 Bootie, John, 46.
 Boulton and Scale, 293.
 Boulton, Matthew, 77, 200, 218, 292 *et seq.*
 Boyle, Hon. R., quoted, 212, 255, 256.
 Britannia metal, 19.
 Browne, Dr. Edward, quoted, 253.
 Buckles and buttons, 14, 74 *et seq.*
 Burnishing, 42, 209, 210, 214, 217.

 Cadman, George, 202.
 Candlesticks, special treatment of, 42, 48, 201, 204.
 Casting, 12, 48.
 Celtic metal-work, 4.
 Chaffers, quoted, 22.

 Chamberlayne, William, 44.
 Chasing, 56 *et seq.*
 Chickley, Sir Thomas, 255.
 China ware, introduction of, 8.
 Clay, Mr., of Birmingham, 14.
 Close-plating, 215, 260.
 Collins, William, 78.
 Copper, early uses of, 21.
 Copper Mount period, 19, 21 *et seq.*
 Cornish tin-mines, 253.
 Courses, 31.
 Crawford, Maurice, 46.
 Cutlers' Company, 13, 18.
 Cutlers' Hall, 17.

 Darwin, Dr. Erasmus, quoted, 293.
 De la Rive, 213.
 De la Roulz, 213.
 Die-sinking, 49.
 Die-work, earliest, 50.
 Dies, 42, 48 *et seq.*, 208.
 Dixon, James, 19.
 Dixon, Mark, 71.
 Double-plating, 23.
 Drafting, 51, 52.
 Dublin, 19.
 Dublin makers, 341.
 Dutch Sheffield Plate, 344.

 Eastern Nations, their use of metals, 2, 64.
 Edges, silver, 202 *et seq.*; "Turn-over edge," 203, 263; "Sign of Poverty edge," 23, 263; Roberts' edge, 203.
 Edinburgh makers, 339.
 Electro-gilding, 212, 213.
 Electro-plating, 11, 49, 211, 216, 253 *et seq.*, 265.
 Elkington, George and Henry, 257, 259.
 Ellis, Richard, 215.

Embossing, 57, 58, 96.
Engraving, 60, 185, 206.

"Faked" pieces, 263.
Faults in early Sheffield Plate, 83, 184.
Firing the plate, 24.
First period, 21 *et seq.*; general note, 83;
 illustrations, 88 *et seq.*
Flat-chasing, 57, 59, 60.
Flaxman, 84; employed by Boulton, 293.
Fluting, 61, 102.
Foreign Sheffield Plate, 342 *et seq.*; illus-
 trations, 348 *et seq.*
Forge-hammering and rolling, 24.
Fothergill, 292, 293.
Fontainemoreau, Comte de, 213.
French plating, 24, 27, 207, 211, 218,
 342.
French Sheffield Plate, 342, 343.

German silver, plating on, 19, 21, 49, 197,
 259.
Gilding, 2, 211 *et seq.*; false gilding, 3.
Gilt Sheffield Plate, 71, 214.
Glasgow makers, 340.
Gold-plated Sheffield Plate, 71.
Goldsmiths' Company, 65.

Hall marks, 19.
Hancock, Joseph, 14, 15, 25.
Hegelsheimer (or Held), Frederick, 64.
Hemming, Edmund, 45.
Henry, Dr. William, quoted, 253.
Hickman, Robert, 81.
Hinges, 38.
Hutton's "History of Birmingham"
 quoted, 74, 75, 76.

Ingot, making the, 22, 198.
Ireland, early plated work in, 4, 19.

Johnson, Dr., at Birmingham, 77.

Kirchner, Anastasius, quoted, 253.

Lamerie, Paul de, 10.
London makers, 323-337.

London, plating in, 18; City Companies,
 65.

Makers' Catalogues, 153; illustrations,
 156 *et seq.*, 190 *et seq.*, 248 *et seq.*

Makers' Marks, 16, 92; method of taking
 impressions of, 283; forged marks, 282.

Makers' Marks, examples of:

 Devices only, 275.
 Devices with initials, 277.
 Earliest examples, 267.
 French marks, 343.
 Imitation silver marks, 268.
 Initials only, 278.
 Names and addresses, 279.
 New marks, 280.
 Patent marks, 277.
 Quality marks, 278.
 Registered marks, 268 *et seq.*
 Russian marks, 345.
 Unascribed marks, 280.
 Unascribed foreign marks, 346.
 Workmen's marks, 281.

Marci, Abbé, 45.

Mazers, 7.

Members, addition of, 35, 40, 202 *et seq.*

Merret, Dr. Christopher, quoted, 253.

Merry, Anthony Theophilus, 197.

Mexican silversmiths, 3.

Mitchell, James, 208.

Mountings, 12, 35, 41, 50, 202 *et seq.*,
 218.

Nottingham, 18, 338.

Nottingham makers, 338.

Origin of Sheffield Plate, 1.

Papendiek, Mrs., quoted, 8, 9, 14.

Parkes, Alexander, 259.

Patents, 19, 44, 45, 46, 65, 69, 71, 78,
 79, 81, 184, 197, 199, 203, 208, 215,
 254, 257, 277.

Pepys' Diary quoted, 7, 10, 75.

Peruvian silversmiths, 3.

Pewter, 8, 9, 10.

Pewterers' Company, 8.

Piercing, 60, 62, 63, 84.

- Plate, meaning and derivation of the word, 1.
- Plating, definition of, 2; in ancient times, 2-5; method re-discovered, 13.
- Plating wire, processes for, 65, 71.
- Playfair, William, 78.
- Pliny, quoted, 2, 21, 44, 211.
- Porcelain, introduction of, 9.
- Poulain, John, 46.
- Preparing the silver plate, 22.
- Prices, original makers', 153.
- Process of manufacture (First Period) 21 *et seq.*; (Second Period), 197 *et seq.*
- Purling, Major, 8.
- Raising, method of, 11, 12, 28 *et seq.*, 200.
- Rawle, Valentine, 184.
- Repairing, 262.
- Replating, 261.
- Roberts, Samuel, 17, 202, 203.
- Rolling, 15, 17, 24, 25, 200.
- Roman metal work, 2, 3, 44.
- Rupert, Prince, 254, 255.
- Russian Sheffield Plate, 344.
- Scales, 33.
- Scotland, 19.
- Seams, method of making, 28; seam test, 263.
- Second Period, 197 *et seq.*; general note, 217 *et seq.*; illustrations, 220 *et seq.*
- Sheffield, process discovered in, 13; development of plating in, 15, 17-20, 218; Walpole's description of, 18.
- Sheffield Assay Office, 16, 268, 272, 273.
- Sheffield Makers, 284-291.
- Shields (bright-engraving), 206.
- Silver, value of solid, 10; method of working prior to Sheffield Plate, 11.
- Silver cast candlesticks, 48.
- "Silveret," 197.
- Silver Mount period, 19, 197 *et seq.*
- Silver spoons, weight and wear of, 34.
- Smith, Nathaniel and Co., 153.
- Snarling-iron, 58, 61.
- Society for the Encouragement of Arts, Manufactures, and Commerce, 45.
- Soho Factory, the, 18, 77, 200, 205, 276, 292 *et seq.*
- Soho Mint, 293.
- Soho Sick Club, rules, 295.
- Soldering, methods of, 28, 36 *et seq.*, 40.
- Southwell, Robert, 211.
- Spinning, 200.
- Stamping, 50 *et seq.*; (Mitchell's method), 208.
- Steel, plating on, 215.
- Stratford, Mr., on Bolsover's discovery, 13.
- Swaging, 53 *et seq.*
- Taylor, John, 75.
- Tests (seams), 263, 264; (scraping), 265; (colour), 265; (summary), 265, 266; (filemarks), 266.
- Theophilus (Rugerus), his "De diversis Artibus," 73.
- Tinning, 41, 44 *et seq.*
- Transition period, 155, 184 *et seq.*; illustrations, 140, 146, 148, 186 *et seq.*
- "Treene" vessels, 7, 8.
- Tudor, Leader and Sherburn, 17, 25.
- Turner, John, 199.
- Tutin, William, 19.
- Tylor, John, 46.
- Walpole, Horace, quoted, 7, 18, 84.
- Watson, Dr., quoted, 211.
- Watson, Arnold T., quoted, 23, 211, 273.
- Watt, James, 200, 292.
- Wateley, George, 65 *et seq.*
- White metal substitutes for silver, 19.
- Whitmore, Thomas, 254.
- Whitworth, John, 19.
- Wicklow copper mines, 253.
- Wilks and Mottram's process for plating wire, 71.
- Wire drawer, 65.
- Wire Drawers' Company, 65.
- Wire smith, 65.
- Wirework, 64 *et seq.*, 222.
- Wooden vessels, 7.
- Wright, John, 258, 259.
- Yarrenton, Andrew, 44, 45.



CHISWICK PRESS: CHARLES WHITTINGHAM AND CO.
TOOKS COURT, CHANCERY LANE, LONDON.

SMITHSONIAN INSTITUTION LIBRARIES



3 9088 00699 9965